

La DOTD - Registered Water Wells

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Rouge																
East Baton Rouge	053	BREC	-1324		AMY, M. E.	265	IRRIGATION	10X8X6	08/03	48	08/11/03	00000000	303346	911011	DW	1.01
East Baton Rouge	054	EXXON PLASTICS	-5201Z	MW-A	BURMAH	31	MONITOR	4	01/86	1.17	01/06/86	112SESC	303309	911033	DW	0.30
East Baton Rouge	069	EXXON PLASTICS	-5202Z	MW-B	BURMAH	31	MONITOR	4	01/86	1.56	01/06/86	112SESC	303304	911048	DW	0.06
East Baton Rouge	054	EXXON PLASTICS	-5203Z	MW-C	BURMAH	31	MONITOR	4	01/86	5.13	01/06/86	112SESC	303303	911041	DW	0.17
East Baton Rouge	054	EXXON PLASTICS	-5226Z	MW-10	BURMAH	25	MONITOR	4	03/86	6.67	03/20/86	112SESC	303305	911051	DW	0.02
East Baton Rouge	054	EXXON PLASTICS	-5227Z	MW-11	BURMAH	30	MONITOR	4	03/86	4.29	03/20/86	112SESC	303304	911055	DW	0.08
East Baton Rouge	054	EXXON PLASTICS	-5228Z	MW-12	BURMAH	27	PLUGGED	4	03/86	6.21	03/20/86	112SESC	303306	911055	DW	0.07
East Baton Rouge	054	EXXON PLASTICS	-5229Z	MW-13	BURMAH	28	MONITOR	4	03/86	11.13	03/20/86	112SESC	303308	911054	DW	0.06
East Baton Rouge	054	EXXON PLASTICS	-5230Z	MW-14	BURMAH	29	MONITOR	4	03/86	9	03/20/86	112SESC	303310	911051	DW	0.08
East Baton Rouge	054	EXXON PLASTICS	-5231Z	MW-15	BURMAH	10	MONITOR	4	03/86	5.65	03/20/86	112SESC	303312	911051	DW	0.11
East Baton Rouge	054	EXXON PLASTICS	-5302Z	MW-16	BURMAH	10	MONITOR	4	03/86	5.9	03/11/86	112SESC	303306	911052	DW	0.02
East Baton Rouge	054	EXXON PLASTICS	-5303Z	MW-17	BURMAH	32	PLUGGED	4	03/86	4	03/20/86	112SESC	303307	911049	DW	0.04
East Baton Rouge	054	EXXON PLASTICS	-5304Z	MW-18	BURMAH	28	PLUGGED	4	03/86	3.6	03/20/86	112SESC	303308	911048	DW	0.06
East Baton Rouge	054	EXXON PLASTICS	-5306Z	MW-19	BURMAH	10	PLUGGED	4	03/86	3.71	03/20/86	112SESC	303309	911045	DW	0.11
East Baton Rouge	054	EXXON PLASTICS	-5306Z	MW-20	BURMAH	30	PLUGGED	4	03/86	5.19	03/12/86	112SESC	303309	911044	DW	0.13
East Baton Rouge	054	EXXON PLASTICS	-5307Z	MW-21	BURMAH	10	MONITOR	4	03/86	4.58	03/20/86	112SESC	303309	911033	DW	0.30
East Baton Rouge	054	EXXON PLASTICS	-5308Z	MW-22	BURMAH	10	PLUGGED	4	03/86	4.17	03/20/86	112SESC	303316	911043	DW	0.23
East Baton Rouge	054	EXXON PLASTICS	-5309Z	MW-23	BURMAH	10	MONITOR	4	03/86	4.31	03/20/86	112SESC	303314	911040	DW	0.24
East Baton Rouge	054	EXXON PLASTICS	-5310Z	MW-24	BURMAH	10	MONITOR	4	03/86	4.88	03/20/86	112SESC	303317	911037	DW	0.31
East Baton Rouge	054	EXXON PLASTICS	-5311Z	MW-25	BURMAH	10	MONITOR	4	03/86	3.74	03/20/86	112SESC	303319	911041	DW	0.30
East Baton Rouge	054	EXXON PLASTICS	-5312Z	MW-32	BURMAH	30	MONITOR	4	03/86	8.17	03/20/86	112SESC	303317	911037	DW	0.31
East Baton Rouge	054	EXXON PLASTICS	-5565Z	MW-22B	SOIL TESTING	10	MONITOR	4	07/87			112SESC	303321	911039	D	0.35
East Baton Rouge	054	EXXON PLASTICS	-5566Z	MW-26	SOIL TESTING	10	MONITOR	4	07/87			112SESC	303323	911049	D	0.33
East Baton Rouge	054	EXXON PLASTICS	-5567Z	MW-27	SOIL TESTING	10	MONITOR	4	07/87			112SESC	303325	911047	D	0.37
East Baton Rouge	054	EXXON PLASTICS	-5568Z	MW-28	SOIL TESTING	32	MONITOR	4	07/87			112SESC	303323	911046	D	0.34
East Baton	054	EXXON	-	MW-29	SOIL TESTING	10	MONITOR	4	07/87			112SESC	303339	911039	D	0.66

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East Baton Rouge	054	EXXON PLASTICS	5571Z	MW-30	SOIL TESTING	42	MONITOR	4	07/87			112SESC	303330	911032	D 0.56
East Baton Rouge	054	EXXON PLASTICS	5572Z	MW-31	SOIL TESTING	10	MONITOR	4	07/87			112SESC	303329	911032	D 0.54
East Baton Rouge	054	EXXON PLASTICS	5573Z	MW-33	SOIL TESTING	10	MONITOR	4	07/87			112SESC	303321	911032	D 0.42
East Baton Rouge	069	EXXON PLASTICS	5574Z	MW-34	SOIL TESTING	10	MONITOR	4	07/87			112SESC	303302	911037	D 0.24
East Baton Rouge	069	EXXON PLASTICS	5575Z	MW-35	SOIL TESTING	37	MONITOR	4	07/87			112SESC	303302	911038	D 0.23
East Baton Rouge	069	EXXON PLASTICS	5576Z	MW-36	SOIL TESTING	10	MONITOR	4	07/87			112SESC	303304	911045	D 0.11
East Baton Rouge	069	EXXON PLASTICS	5577Z	MW-37	SOIL TESTING	32	MONITOR	4	07/87			112SESC	303304	911045	D 0.11
East Baton Rouge	068	BATON ROUGE, LA	5718Z	3	LAYNE (LA)	85	PLUGGED	4	05/88	24	05/02/88	112SESC	303250	911155	D W 1.10
East Baton Rouge	068	BATON ROUGE, LA	5719Z	4	LAYNE (LA)	55	PLUGGED	4	05/88	25	05/13/88	112SESC	303245	911150	D W 1.05
East Baton Rouge	068	BATON ROUGE, LA	5720Z	5	LAYNE (LA)	52	PLUGGED	4	05/88	36.5	05/16/88	112SESC	303243	911152	D W 1.10
East Baton Rouge	069	EXXON PLASTICS	6590Z	MW-38	G & E	16	MONITOR	4	11/90	DRY	11/05/90	112SESC	303306	911050	D W 0.02
East Baton Rouge	054	EXXON PLASTICS	6619Z	12-A	LAYNE ENVIRON-	25	MONITOR	4	03/91	7	03/06/91	112SESC	303305	911054	D W 0.05
East Baton Rouge	037	RHONE- POULENC	6694Z	MW-1A	LAYNE (ENV)	20	PLUGGED	2	04/91	7	04/10/91	112MRVAC	303333	911116	D W 0.66
East Baton Rouge	073	EXXON CO USA	7111Z	MD-1	DAMES & MOORE	22	PLUGGED	3	1980			112SESC	303240	911124	0.74
East Baton Rouge	068	EXXON CO USA	8381Z	MW-1	UNKNOWN	40	PLUGGED	3	04/79			112SESC	303253	911136	0.78
East Baton Rouge	068	EXXON CO USA	8382Z	MW-3	UNKNOWN	20	PLUGGED	3	04/79			112SESC	303255	911140	0.83
East Baton Rouge	068	EXXON CO USA	8383Z	MW-4	UNKNOWN	20	PLUGGED	3	04/79			112SESC	303252	911140	0.85
East Baton Rouge	068	EXXON CO USA	8384Z	MW-5	UNKNOWN	20	PLUGGED	3	04/79			112SESC	303255	911142	0.87
East Baton Rouge	068	EXXON CO USA	8385Z	MW-6	UNKNOWN	40	PLUGGED	3	04/79			112SESC	303254	911148	0.97
East Baton Rouge	073	EXXON MOBIL	8503Z	MD-2	UNKNOWN	20	PLUGGED	3	01/80			112SESC	303243	911136	0.86
East Baton Rouge	073	EXXON MOBIL	8504Z	MD-3	UNKNOWN	20	PLUGGED	3	01/80			112SESC	303244	911132	0.80
East Baton Rouge	002	STUPP CORP	8508Z	MW-1	SINGLEY	30	MONITOR	4	04/01	6.66	05/09/01	112MRVAC	303343	911104	D W 0.74
East Baton Rouge	002	STUPP CORP	8509Z	MW-2	SINGLEY	29	MONITOR	4	04/01	5.30	05/09/01	112MRVAC	303342	911102	D W 0.71
East Baton Rouge	002	STUPP CORP	8510Z	MW-3	SINGLEY	29	MONITOR	4	04/01	5.92	05/09/01	112MRVAC	303343	911100	D W 0.72
East Baton Rouge	002	STUPP CORP	8511Z	MW-4	SINGLEY	30	MONITOR	4	04/01	6.21	05/09/01	112MRVAC	303344	911103	D W 0.75
East Baton	002	STUPP		MW-5	SINGLEY	31	MONITOR	4	04/01	4.36	05/09/01	112MRVAC	303333	911040	D W 0.55

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East Baton Rouge	002	STUPP CORP	8513Z	MW-6	SINGLEY	30	MONITOR	4	04/01	4.11	05/09/01	112MRVAC	303332	911042	D W	0.52
East Baton Rouge	002	STUPP CORP	8514Z	MW-7	SINGLEY	32	MONITOR	4	04/01	2.22	05/09/01	112MRVAC	303331	911041	D W	0.51
East Baton Rouge	002	STUPP CORP	8515Z	MW-8	SINGLEY	37	MONITOR	4	04/01	4.08	05/09/01	112MRVAC	303332	911037	D W	0.55
East Baton Rouge	069	PLANTATION PIPE	8553Z	MW-1	URS CORPORATION	19	MONITOR	2	07/01	7.25	07/10/01	112SESC	303303	911030	D W	0.35
East Baton Rouge	069	PLANTATION PIPE	8554Z	MW-2	URS CORPORATION	28	MONITOR	2	06/01	7.75	07/10/01	112SESC	303246	911001	D W	0.91
East Baton Rouge	069	PLANTATION PIPE	8556Z	MW-4	URS CORPORATION	20	MONITOR	2	07/01	10.78	07/10/01	112SESC	303302	911017	D W	0.57
East Baton Rouge	069	PLANTATION PIPE	8558Z	MW-6	URS CORPORATION	16	MONITOR	2	07/01	8.0	07/10/01	112SESC	303245	911033	D W	0.50
East Baton Rouge	069	PLANTATION PIPE	8561Z	PZ-1	URS CORPORATION	20	PIEZOMETER	2	07/01	13.75	07/10/01	112SESC	303258	910959	D W	0.87
East Baton Rouge	069	PLANTATION PIPE	8563Z	PZ-3	URS CORPORATION	25	PIEZOMETER	2	06/01	8.25	07/10/01	112SESC	303242	910957	D W	1.00
East Baton Rouge	068	CNA HOLDING CO	8645Z	MW26	WALKER-HILL (CO)	62	MONITOR	2	06/02	13	06/24/02	112MRVAC	303300	911147	D W	0.93
East Baton Rouge	068	CNA HOLDING CO	8646Z	MW27	WALKER-HILL (CO)	70	MONITOR	2	06/02	13	06/24/02	112MRVAC	303300	911147	D W	0.93
East Baton Rouge	053	BREC	8740Z		AMY, M. E.	231	PLUGGED	4	07/03	48	07/09/03	00000000	303346	911010	ED W	1.02
East Baton Rouge	054	EXXON MOBIL	8999Z	MW-1	CRA, INC.	18	MONITOR	2	06/05	3.49	06/27/05	00000000	303328	911025	D W	0.60
East Baton Rouge	054	EXXON MOBIL	9000Z	MW-2	CRA, INC.	18	MONITOR	2	06/05	3.18	06/27/05	00000000	303328	911025	D W	0.60
East Baton Rouge	054	EXXON MOBIL	9001Z	MW-3	CRA, INC.	18	MONITOR	2	06/05	3.83	06/27/05	00000000	303329	911025	D W	0.61
East Baton Rouge	054	EXXON MOBIL	9002Z	MW-4	CRA, INC.	18	MONITOR	2	06/05	3.85	06/27/05	00000000	303329	911024	D W	0.63

Available Information:

E - Geophysical Log
D - Driller's Log
M - Mechanical Analysis
Q - Quality of Water
P - Pumping Test
W - Water Level
B - Bacteriological Analysis

[Parish Codes] [Well Use Sub-Use Codes] [Explanation of Terms]

APPENDIX G

CONTINGENCY PLAN

ExxonMobil Chemical EMERGENCY PROCEDURES MANUAL BATON ROUGE PLASTICS PLANT	Section 1.0 Date: June 2002 Rev: 16 Page 1 of 42
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**EXXONMOBIL CHEMICAL COMPANY
BATON ROUGE PLASTICS PLANT
EMERGENCY ORGANIZATION**

I. PHILOSOPHY

The Baton Rouge Plastics Plant believes in accident and incident prevention through a sound risk management process; however, Management also realizes the importance of being prepared to cope with any emergency that conceivably may arise. This preparation is accomplished by careful planning, the acquisition of proper equipment, the provision of proper training of the personnel involved and the access to appropriate expertise and backup for those situations in which BRPP personnel are not trained to handle.

Experience over the past two decades has shown that the vast majority of emergencies encountered are either process unit fires or medical by nature. Fires are usually quickly extinguished cutting off or valving out the fuel. Medical emergencies are handled through the First Responder level by a trained Medical Emergency Response Team (See Section IV of this Manual) and rapid support from the Emergency Medical System (EMS).

Major incidents involving fires are extremely rare, as past experience has indicated. For this reason, BRPP would rely on trained outside resources if such an event did occur, rather than train personnel internally.

BRPP personnel are trained by OSHA and expected to suppress fires in the incipient stage. "Incipient" fires are defined by OSHA as a small fire requiring offensive action where good visibility with minimum heat exposure exists. Suppression of such a fire requires either portable fire extinguishers or hand lines flowing up to 125 GPM to extinguish and no special clothing or self-contained breathing apparatus is needed. All fires at BRPP will be handled using an Incipient Response.

The primary responding agency, if external assistance is required the the ExxonMobil Complex Emergency Response Organization, which includes their Volunteer Fire Squads, HAZMAT Team, Rescue Team, and Industrial Hygiene Group. These organizations are fully trained to handle any situation which might occur at BRPP.

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Secondarily, the BRFD HAZMAT Team is the designated responder if assistance is requested from any EBR Parish Fire Department.

Note: For incidents involving inbound chemical shipments to BRPP outside the BRPP boundary, refer to Emergency Procedure Manual, Section 7.0, "CHEMTREC Communications Procedures", Paragraph B., "Inbound Shipments".

II. INCIDENT COMMAND SYSTEM (ICS)

The Incident Command System (ICS) is a standard emergency command system used by emergency response agencies and industry across the nation. The advantages of such a system are not only its flexibility which allows it to be utilized for any size emergency at any severity level, but also, the terminology and the command system is understood by most, if not all, emergency response agencies which may be involved.

BRPP has chosen to adopt the system because of the growing complexity of our operation, the increasing in: the variety and quantity of chemicals stored on-site, interest the general public and the news media have shown in industrial operations, regulatory control over emergency response and the concomitant reliance of external agencies for support in upper severity level incidents.

The Incident Command System is divided into two major groups:

- Incident Command Group - Basically is charged with dealing with the emergency as it manifests itself, on the scene. The ICG also has the responsibility of dealing with external emergency responders, as they arrive on the scene and coordinating and managing the combined effort.
- Incident Management Group - This Group is made up of the top level Managers in the Plant. Their charge is to deal with the news media, local citizens and elected officials and to communicate Company and Corporate officials, as required. Included in their primary responsibilities are to ensure employees' and Contractors' employees' families are notified on a timely basis if injuries are involved and to obtain an accurate picture of the situation for communication to the news media and the Company.

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III. GENERAL

The BRPP Emergency Organization is designed around the "Incident Command System (ICS)", which is used universally by Emergency Response Agencies in the United States. This document was developed in accordance with OSHA regulations and the NFPA 600 Standard. The System allows effective control of major as well as minor incidents that may occur at the plant.

At BRPP, the Operations Safety Specialist (OSS) is the Administrative Fire Chief and the owner of the Emergency Procedures Manual. Any questions concerning Emergency Procedures should be directed to the OSS.

A. Control Centers

1. Incident Command Center (ICC)

The Incident Command Center (ICC) is the location of the Incident Commander. The ICC will normally be located at the scene of the emergency.

2. Emergency Communications Center

The Emergency Communications Center will normally be located in the Q.C. Laboratory Shift Supervisor's Office in the Base Plant Control Center Building. In the event that use of this room is denied, the second alternate will be Room 129 (Planning Office) in the Administration Building. In the event that it is necessary to evacuate the plant, communications can be set up in the Main Parking Lot, the North Parking Lot, the Construction Parking Lot at Thomas Road or at another location near the plant.

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SUBJECT: EMERGENCY ORGANIZATION**3. Incident Management Center (IMC)**

The Human Resources Conference Room, Room 261, is designated as the Incident Management Center (IMC) and will be occupied by the Incident Management Group. In the event that the plant must be evacuated, this Group will assemble in the Main Parking Lot or Construction Parking Lot at Thomas Road, as the situation dictates.

B. Communications**1. Operations Area - Emergency Notifications**

Emergency Alert System - The Emergency Alert System (EAS) is a computer based Alert System using computer software to control and monitor the equipment associated with this system. This equipment includes high powered sirens, a public address system, and light strobes. This system can be activated from any of the consoles in the Control Center, from the Central Control Unit (CCU) located in the Control Center, or the Portable Activation Unit (PAU) located in the Incident Management Center.

The Emergency Alert System meets the requirement of 1910.165 by providing an alarm that is distinctive, recognizable, and capable of being perceived above ambient noise and light levels. The EAS performs an automated self check at 24 hour intervals. The results of this check are disclosed in a report that will provide positive notification to the assigned personnel whenever a deficiency exists in the system.

The EAS is manually checked each Wednesday at 1200 hours. The purpose of this test is to maintain Plant familiarity with the operation of this system as well as providing a redundant verification of system operability.

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Emergency Reporting - The reporting of an emergency condition, whether fire, gas release, medical emergency or other, can be affected through any ExxonMobil or Contract employee equipped with a radio. The employee will call A4 or C5, J4 or L4, depending on the location of the situation, who will make the emergency declaration as indicated below. Emergency reports can also be made by dialing "444" on any plant telephone. A4 or C5 and J4 in the Base Plant and E-Line Control Rooms respectively will answer this telephone.

Emergency Declarations - All channels of the plant radio system and the PA System will be used to declare an emergency and to sound the "All Clear". The Control Board Operator in the Base Plant (A4 or C5) or E-Line (J4) will sound a distinctive warble on the PA System to notify all plant personnel of the emergency. All hot work will stop until the "All Clear" is given. All hot work permits must be revalidated after the "All Clear" is announced over the PA System and all radio channels and before continuance of work.

A medical emergency declaration will be given by announcing a "CODE BLUE" over the radio channels and PA System, followed by the location and nature of the emergency.

2. Operations Area - Emergency Radio Communications

If an emergency occurs, Radio Channel #1 will become the emergency channel for all emergency radio traffic. Channel #2 will be used for Base Plant and E/F-Line normal communications. All Control Board Operators will monitor Channel #1 in addition to their routine communications channel.

3. Operations Area - Emergency Telephone Communications

Three intrinsically-safe cellular portable telephones are maintained in the Main Gate Guard House and one in the Incident Management Center for emergency use in the field. These telephones are for use by the Incident Commander (IC), the Emergency Advisor the Safety

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Officer or anyone else designated to handle critical aspects of a plant emergency. The telephones may be obtained with the permission of the Incident Commander (IC) or the Plant Manager or his/her delegate.

4. Emergency Communications Center

The Emergency Communications Center is equipped with a console radio which can receive and transmit on channels #1 and #2. The Center also has a telephone with all Lab telephone extensions (ext.'s 256, 284, 330, 404, 405 and 406) and a private telephone for external emergency communications (775-7033). Other communications media include a Hot Line telephone, a FAX machine (977-6406), H.P. Mail (E-Mail) and a mike to transmit over the Administration Emergency Intercom System.

5. Administration Building - Incident Management Center (IMC)

In the event of an Emergency or an Emergency Drill, the Incident Management Center (IMC) will be set up in the H.R. Conference Room (Room #261). This room is equipped with radio receivers for Channels #1 and #2, a mike for the Administration Building Emergency Intercom System and a telephone (977-6448) for Emergency Communications. An intrinsically safe cellular telephone is maintained in the Incident Management Center (IMC) for use by the Emergency Advisor to set up a communications link from the Emergency Scene to the Incident Management Center (IMC) via telephone.

6. Administration Building - Telephone System

The AT&T G3i "Definity" Series is the main telephone system used throughout the plant. It is capable of both digital and analogue signaling and will handle multiple incoming calls on the digital phones. The System is equipped with dual internal processors, so if one unit fails, the other takes over with no interruption in service. In the event

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of a power failure, the System is connected to a UPS Power back-up and will continue to operate for a period of approximately 8 hours. If the System goes completely down (more than 8 hours of operation during a power failure or both processors fail), ten phone lines will remain functional for out-dialing only. These phones are Poly - ext. 242, Lobby - ext. 283, Main Gate - ext. 281, Scale House - ext. 325, Q.C. Lab - ext. 330, E-line FLS Office - ext. 386, E-Line Control - ext. 387, Telephone Room - ext. 425, H.R. Conference Room - ext. 448 and F-line Console - ext. 472.

7. Administration Building - Other Communications

Emergency Intercom System - The Administration Building is equipped with an Emergency Intercom System with speakers located in the hallway ceilings throughout the Building. In the event of an emergency, emergency drill or a building evacuation alarm, an automatic voice announcement and alarm tone will be activated by a Console Technician or through the Fire Alarm System. This alert will be transmitted over the Emergency Intercom System.

Mike inputs for the Emergency Intercom System are located in the Emergency Communications Center, the Incident Management Center and at the Main Lobby Receptionist's Desk. Voice announcements from any of these locations will override the automatic alarm announcements on the System. The amplifier for the System is located in the Telephone Equipment Room in the Administration Building (Room #124).

Back-up Communications Center

A stationary desk-top radio with communications capabilities on Channels #1 and #2 is located in the Planning Supervisor's Office (Room 129) in the event that the Emergency Communications Center has to be re-located to the Administration Building.

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8. Other Plant Emergency Communications

Main Gate Guard House - Equipped with the Hotline Telephone, two regular telephones, ext. 281 and 325, and the three intrinsically-safe cellular telephones, described in Paragraph 3. Two-way radios include a desk-top radio with Channels #1 and #2, a portable radio with all plant channels for use if HAZMAT assistance is needed, two portable radios tuned to the BRCP/Refinery Emergency Channel and a stationary Mutual Aid Channel Radio.

Medical First Aid Room, West Office Annex - Equipped with two receiver speakers for Channels #1 and #2. One telephone, ext. 226.

Fire Alarm Systems - Described in Sections III and XI of this Manual.

9. External Communications

Communications to outside the Plant, except for emergency communications, should stop during the existence of an emergency. All communications to the news media and notification of families is the responsibility of the Human Resources Manager (Public Affairs Officer) as authorized by the Plant Manager (Incident Manager).

a. Community Agencies

In the event that community agencies must be notified of an incident or assistance from them is needed, the calls will be made from the Emergency Communications Center. The decision to seek outside assistance in an emergency will be made by the Incident Commander. Calls to the agency or agencies needed will be made on his/her authorization.

Refer to VI.C of this document for further details on contacting community Emergency Response Agencies.

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b. Neighbors

Incoming calls from the neighbors will probably be received by the Administration Building Receptionist (if the emergency occurs during straight day hours) or by the Main Gate Guard (after 4:15 PM and on weekends and holidays). Calls received by the Receptionist will be referred to the Room 258 (ext. 371). Calls received by the Guard will have to be fielded by the Emergency Communications Center until support arrives or until a statement is prepared that the Guard is authorized to release.

Further details on how to handle neighborhood inquiries and complaints can be found in VI.B of this document.

c. News Media

The Public Affairs Officer (PAO) will normally handle all news releases. He/she should be notified of any emergency when the Hotline is called or that would be of interest to the community or the press or which would be of concern to employees' (ExxonMobil or Contractor) families. The PAO beeper number is listed in the Emergency Callout List in the front of this Manual. Details for handling news media inquiries can be found in VI.A of this document. Further information on how the Public Affairs System is designed to work can be found in Section XII of this Manual.

C. Declaration of a Plant Emergency

The occurrence of a fire or explosion or other type emergency that may be recognized and designated as a condition requiring assistance will be declared a Plant Emergency. Notification of an emergency can be made by radio, word of mouth or by dialing "444" on any plant telephone. At the affected Area Supervisor's request, the corresponding Board Operator will use the "All Call" System to announce, "We have an Emergency, We have

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an Emergency, fire in 'A' Recycle Bay (or whatever the nature of the emergency is)".

The emergency siren should then be activated. Once the Emergency Communications Center is activated, the announcement of the emergency over the Administration Building Emergency Intercom System will be authorized by the Incident Commander (IC).

Any notice of evacuation authorized by the Incident Commander (IC) and the Safety Officer will be given using the "All Call" System. The announcement will be repeated over the Administration Building Emergency Intercom System. The direction of evacuation and the rallying point for affected personnel should be announced also. Suggested areas should be the Administration Building or one of the Plant parking lots. Each reactor system A, B, C, D, E, and F has a single "Emergency Shutdown" button that can be activated by the console Operator of each area. Operations personnel can quickly evacuate the Operations area of the plant after these Emergency Shutdown buttons have been activated.

Only the Incident Commander (IC) has the authority to approve an "All Clear", once he/she is satisfied that the plant emergency is suppressed, that a final headcount of field personnel has been performed, all personnel are accounted for and there is no concern for other elements of the emergency. On direction of the IC, the "All Clear" should be announced on the "All Call" System by the appropriate Board Operator and on the Administration Building Emergency Intercom System by the Communications Chief.

Note: The emergency siren can be switched to intermittent after several minutes. This will allow better communication in the field and in the Admin. Management Center.

D. Building Fires

All building fires will be handled by Plant personnel only if they are in the incipient stage; i.e., the fire can be quickly extinguished by smothering or with an appropriate fire extinguisher. In case of a larger fire, the building will be promptly evacuated and the BRCP Superintendent will be called for

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BRRF/BRCP Fire Squad assistance. The Superintendent's telephone numbers are listed in the Emergency Callout List in the front of this Manual.

E. Headcounts

Each Shift Supervisor, Operations Services Supervisor and Contract Maintenance and Construction Supervisor will account for his/her people and report this accounting as outlined in Section VI of this document.

Personnel in temporary trailers and buildings will evacuate to their point of entry during an emergency. Those personnel whose point of entry was the main gate will assemble outside the northeast corner of the Contract Maintenance shop, inside the fence line.

- Those personnel in E-Row and P-Row trailers will remain in the trailers during an emergency, unless otherwise instructed by Incident Commander (IC).

Personnel assigned to the West Office Annex who do not have other emergency responsibilities will remain in their offices during an emergency unless instructed to evacuate by the Incident Commander (IC). Their headcount will be reported to the Main Gate Guard House by the Safety Coordinator or his delegate.

Personnel assigned to the Administration Building will remain in their offices during the emergency with the exception of those assigned elsewhere, as outlined in Section VI of this document. Individuals signed out on the check-out boards will be accounted for as outlined in Section VII.C.f. of this document. Personnel not signed out on one of the check-out boards will be assumed safe.

Final Headcount of Field Personnel - Before the "All-Clear" is announced, the Incident Commander (IC) will request a final headcount of personnel known to be in the field during the Emergency. Normally, this would be Operations Personnel. During a Severity Level 2 or 3 emergency, the headcount may include one or more groups of external emergency responders. These actual

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headcounts will be the responsibility of the various emergency responder leaders. The headcount must be completed and all personnel accounted for prior to announcing the "All-Clear". The Incident Commander (IC) is the only on-scene individual who can authorize the "All-Clear".

F. Emergency Critique

Immediately following all emergencies (Levels I, II or III), a critique will be held with representatives from all responding groups and agencies. The critique will be documented and forwarded to the Operations Safety Specialist. The responsible party for this critique will be the FLS of the area in which the emergency occurred. The purpose of this critique is the same as for drills, i.e. to improve the emergency response at BRPP. The Critique will include a rating of the response as described in the Emergency Procedures Manual, Miscellaneous D. Critiques will be reviewed by the SOC and follow-up items will be tracked using the SOC database.

IV. BRPP EMERGENCY RESPONSE ORGANIZATION

As displayed in the organization chart at the beginning of this document, the BRPP Emergency Response Organization is divided into two separate but important groups:

- **Incident Command Group**
- **Incident Management Group**

The "Incident Command Group" has the basic responsibility of containing and suppressing the emergency on the scene. The "Incident Management Group" is responsible for managing external communications, including those with other affiliates, the news media and neighborhood and community inquiries.

The Incident Command System (ICS) can be expanded as the severity of an emergency warrants. If the severity is low, two or more roles may be filled by one individual. If the severity increases, it may be necessary to notify other individuals or even call them out from home to fill in the organizations of Incident Management and Incident Command:

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A. Incident Command System Roles

Incident Command Role Matrix

Incident Occurs In	IC/Ops. Chief	Safety Officer	Liaison Officer	Emerg. Crew	Reserve Em. Crew
A/B	A41	C41	J41	A/B Line	All Technicians from non-affected areas
E/F-Line	J41	A41	C41	E/F-Line	
C/D	C41	A41	J41	C/D Line	

1. Incident Commander (IC)

(In the event there is a need for a separate Incident Commander and Ops Chief, the acting Ops Chief will be responsible for designating and IC and any back-fill required.)

- Reports to the scene of all emergencies in his/her area of responsibility
- Establishes the Field Incident Command Center (ICC).
- Establishes communications with the Safety Officer and the Emergency Communications Center.
- Conducts the initial Severity Level assessment of the emergency
- Identifies needed response groups
- Determines need to summon further assistance from Management
- Determines the need for a scribe to assist in emergencies requiring outside assistance. This scribe can be any Operations Personnel selected by the ICC.
- Communicates status to the Incident Management Center (IMC), if in operation.

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- Directs activities, including external agencies and support in handling the emergency. This role would be normally filled by the Supervisor/Relief Supervisor of the affected area.

2. Safety Officer

- Reports to the scene of all emergencies
- Monitors safety and health aspects of personnel activities
- Obtains safety equipment, medical assistance, nutrition, as needed
- Responsible for security at the emergency site
- Directs the implementation of the staging area, if one is needed
- Arranges appropriate decontamination procedures, when needed
- Controls traffic and access to the emergency site. This role will be filled by the back-up Supervisor of the unaffected area and is critical. The Safety Officer has the authority to suspend or re-direct any operation that he/she deems unsafe to personnel.

3. Operations Chief

For emergencies of low severity or short duration, the Supervisor of the area of the emergency assumes the role of Operations Chief/Incident Commander. For higher severity incidents the Ops Chief may designate someone as the Incident Commander while they remain the Ops Chief. Responsibilities include:

- Actual direction of the Emergency Crew in containing the emergency to the extent of their capabilities
- Advises the Incident Commander (IC) of the status of the emergency and any injuries or other casualties

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- Supplies expert advice on the area process to the Incident Commander (IC) and other responders
- Advises the Safety Officer of any special safety, health or equipment hazards related to the emergency

The Operations Chief's location will be the scene of the emergency in the proximity of the Incident Commander (IC).

4. Liaison Officer (LO)

If an incident progresses to a Severity Level 2 or 3, external emergency response agencies will have to be summoned. It is important that communications links are set up immediately among the various agencies and plant emergency personnel.

The Supervisor/Relief Supervisor of the unaffected area without back-up responsibility will become the Liaison Officer (LO). His/her duty will be to proceed to the Main Gate Guard House when a Severity Level 2 or 3 condition is announced and await the arrival of the agencies. He/she will meet them at the site where their Command Post will be set up (Typically in the Main or North Parking Lots. The Liaison Officer will remain at the Command Post site and assist the responders in communication with plant personnel (especially the Operations Chief and the Incident Commander) and in answering any questions they may have about BRPP process operations or emergency organization.

5. Medical Emergency Response Team (MERT)

The Medical Emergency Response Team role and responsibilities are outlined in detail in Section IV of this manual. During Severity Level 1 emergencies, Team members will respond as needed and according to its normal protocol. During higher level emergencies, the Team may be directed by the Incident Commander/Operations Chief to set up an aid station in the vicinity of the Incident Command Center (ICC).

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Team members covering critical tasks in an emergency situation when a "Code Blue" is announced can be relieved for response only by authorization of the Incident Commander/ Operations Chief.

6. Emergency Communications Chief

- Reports to the Q.C. Laboratory Supervisor's Office
- Sets up Emergency Communications Center
- Monitors the Emergency Radio Channel (Normally, Channel #1)
- Coordinates headcounts throughout the Plant (using Attachment 9).
- Maintains a Log of emergency activities
- Makes Hotline calls, when appropriate
- Summons external assistance at the direction of the Incident Commander
- Makes initial calls to regulatory agencies, if reporting is required. The Emergency Communications Chief is the Q.C. Laboratory Shift Supervisor or Relief Supervisor (QC41). The Assistants to the Communications Chief are the QY Technician and other Technicians assigned to the Laboratory.

7. Emergency Crew

The Emergency Crew is made up of the Technicians assigned to the affected area of the Emergency. The Emergency Crew:

- Responds to the scene of the Emergency
- Reports to the Incident Commander (IC)/Operations Chief
- Controls the emergency at the direction of the Incident Commander (IC)/Operations Chief. If some members are

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also part of the Medical Emergency Response Team, they will not respond to a "Code Blue" call until permission is received from the Incident Commander /Operations Chief.

8. Reserve Emergency Crew

The Reserve Emergency Crew consists of the Operations Technicians assigned to areas not affected by the Emergency. Members of the Reserve Emergency Crew are on standby and may be utilized at the direction of the Incident Commander (IC).

9. Receptionist

The Receptionist plays a key role in any emergency that happens during regular working hours:

- Checks Visitor Register and accounts for any visitors on-site. All visitors, salespersons and vendors should report to the Main Lobby during an emergency.
- Directs any telephone calls concerning the emergency to Room 258, ext. 371.
- Controls entry of individuals into the Administration Building from the Lobby.
- In the event of a Level 2 or Level 3 Condition, the Receptionist will forward all incoming calls to Room 258, ext. 371 by using the "Call Forwarding" feature.

10. Outside Resources

In severity Level 2 or 3 emergencies, it maybe necessary to call for external assistance. Such aid may range anywhere from ordering a load of sand for diking purposes to asking for help from the BRCP/BRRF Fire Team to fight a storage tank fire.

The Emergency Communications Chief will call the appropriate resources with the direction from the Incident Commander (IC), based

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on need. The telephone numbers of potential external resources are listed in the Emergency Call-out List which is maintained in the front of this Manual.

Note: Orange vests labeled "Incident Commander", "Emergency Chief", "Liaison Officer" and "Safety Officer" are available and should be donned before outside agencies arrive on site. This will aid in communications.

As indicated in the Emergency Response Organization Chart for Incident Severity Levels 2 and 3, these response agencies will be under the command and direction of the BRPP Incident Commander (IC) while inside the plant perimeter. If the emergency occurs outside the plant perimeter, our Incident Commander will be under the command of the lead reporting emergency response agent. This would typically be the BRCP/BRRF Fire Chief or the EBR HAZMAT Commander.

B. Incident Management System (IMS) Roles

1. Incident Manager (Plant Manager)

- Report to the Incident Management Center (IMC)
- Direct Crisis Management activities
- Communicate with community elected officials
- Communicate with Senior Geographic Incident Manager at ECA Headquarters
- Approve any press releases
- Serve as Lead Spokesperson

2. Public Affairs Officer (PAO) (H.R. Manager)

- Report to the Incident Management Center (IMC)
- with Aide
- Assemble Neighborhood and community relations teams

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- Dispatch assistant to Main Gate to meet news media representatives and talk to law enforcement agencies, if needed
- Develop press releases based on information from the Emergency Advisor
- Initiate and prepare employee communications
- Inform relatives of injured employees
- Serve as Spokesperson if Plant Manager is not available
- In conjunction with Medical, inform the family in the event of a fatality
- Provide any needed special assistance to employees, their families or the community

The Public Affairs Officer (PAO) is normally the Human Resources Department Manager or his/her delegate.

- Direct set-up of temporary morgue, staging area for multiple medical pick-ups, if needed

3. Emergency Advisor (Section Supervisor, Affected Area)

- Report to the Incident Management Center (IMC) with assigned portable radio.
- Pick up Cellular Telephone and report to the emergency scene after clearing with the Incident Commander (IC)
- Establish communication with the Incident Management Center (IMC) by cellular telephone
- Serve as On-scene Communicator to the Incident Management Center (IMC) regarding the emergency information and status

The Emergency Advisor is normally the Section Supervisor of the affected area or his/her delegate.

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- report to the Incident Management Center (IMC)
- Provide technical clarifications to the Incident Management Group; i.e., unit operations, impact of damage to business, chemical information, end product uses, etc.
- Assist in development of press releases and communications to the community
- Serve as Emergency Cost Control and Procurement Officer
- Serve as Official Spokesperson, if needed.

5. Non-Affected Management Personnel

- Section Supervisors or delegates report Headcount information to Main Gate Guard
- Stay in assigned offices; respond to Emergency Intercom or telephone requests
- Assist Incident Management Center (IMC), if needed

6. Safety Coordinator, Environmental Coordinator, Industrial Hygienist

- Safety Coordinator or delegate reports West Office Annex Headcount information to Main Gate Guard House
- Remain in offices unless services are required in relation to the Emergency
- Assist Incident Command Center (ICC) or Incident Management Center (IMC), if needed

7. Operations Safety Specialist

- Contacts the Operations Chief to see if he/she needs to assume the IC role.

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V. SEVERITY LEVEL ASSESSMENT AND NOTIFICATION SYSTEM

A. Purpose

The following procedures describe a system for assessment and notification of incidents at the Baton Rouge Plastics Plant. The Incident Severity Assessment and Notification System (Attachment 8), is designed to - manage external events, such as public (community) injuries or damage, regional or national news media inquiries, external environmental affects and national regulatory issues. It is not intended to replace or supercede on-site emergency response plans. The system is based on guidelines of the ECA Emergency Preparedness Plan which is part of our compliance with OIMP 10.1 and 9.1.

The approach for assessing the severity of an incident outside of the fence line takes on an entirely different aspect. When determining the Severity Level of an incident; it must be determined if serious multiple injuries on-site, can be managed on-site with the Incident Command System (ICS) and other well-established procedures for dealing with the appropriate treatment. The Incident Severity Assessment and Notification System deals only with injuries and damage to the community and the Severity Level should reflect this. Unless the incident involved injuries to the public, the assessment in this "Exposure Factor" would be properly rated at "0", for the purposes of this system.

The Emergency Preparedness Operations and Planning Department at ECA in Houston strongly encourages the use of the System any time an incident occurs, however minor. In addition, the Department Planners request that drills be held with them on at least an annual basis.

B. Incident Severity Determination

Initial assessment will be done by the Incident Commander or his/her delegate. If the Incident Management Group is activated, further assessments will be done by the Group, primarily by the Official Designated Spokesperson.

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Assessment will be made based on input from the Incident Command Center, the Emergency Advisor and what is detected from current radio and television reports and telephone inquiries.

Attachment 3 in this Section contains qualitative measures in each of the six major factors for determining the Severity Level of an emergency that may occur.

Attachment 4 is a work sheet for determining the overall assessment in each of the six factor areas. Note the statement at the bottom of the page that reads, "Equals highest rank reached among any one of the six exposure factors—". This means that if any of the six factors is rated a "2" and the other five are rated "1", the overall assessment of the incident should be given an assessment of "2". Severity Level identification is one of the first priorities of the Incident Commander or Incident Management Group. This determination must be made in order to know who must be notified and how much of the Incident Command System must be activated and to know whether further notifications within the Company are needed.

Most small incidents at BRPP have never exceeded Severity Level 1 situations; however, there is the potential for the Severity Level to change rapidly as a events occur. The Severity Level must be re-evaluated as changing conditions demand.

Notification is mandatory when any one of the six factors is ranked at a Level 2 or higher or when there is a Level 1 incident with news media coverage.

Attachment 5 is the procedure for contacting the ECA Emergency Coordinator, if appropriate, in Houston. The ECA Emergency Response Coordinator will be contacted when any Severity Level 2 or 3 incident occurs, or when a Severity Level 1 Incident occurs with news media coverage involved. Contact will be made only by the Plant Manager or his delegate. A current copy of the ExxonMobil Chemical Emergency Response Field Manual will be maintained in the Incident Management Center (normally the HR Conference Room). This manual contains all of the critical telephone numbers necessary for emergency communications with Houston as well as other ECA plant, sales and shipping sites.

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Attachment 6 is a record documentation to be used by the Incident Management Group any time a call to the ECA Emergency Response Coordinator is necessary. This will provide permanent documentation any time external communication is necessary during an incident.

Attachment 7 is a work sheet that can be used by both the Incident Management Group and the Emergency Advisor to collect and relay information from the emergency site. The use of this sheet will aid in minimizing any communications errors and in ensuring that information is complete.

Attachment 8 is a guideline for internal and external notifications for Incident Severity Levels 1 - 3. This table is to be used only as a reminder and is not to be used as a checklist.

C. Notification and Documentation

- "0" or "1" Assessment incidents, unless there is media coverage, need not be reported to ECA or ECC.
- Level 2 or Level 3 incidents will be reported to the ECA Emergency Response Coordinator according to the Directives.
- It is recommended that the Designated Spokesperson utilize the experience of the Management Team to concur on assessments that have the potential to exceed Level 1 severity.

VI. **AREA EMERGENCY RESPONSIBILITIES**

In the event of an emergency, the Shift Supervisors will have special duty areas of responsibility as outlined below.

A. A/B-Line Shift Supervisor or Relief Supervisor (A41)

1. A/B-Line Polymerization and Finishing Operations

- a. All process, mechanical and electrical equipment from the Metering Station to the Product Storage Bins/Blenders for "A and B-Lines".

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- b. Purge Gas Purification Unit (PGPU)
 - c. Flare System
 - d. All Utility Systems North of 3rd Street
 - e. Initiator Storage Buildings and surrounding area
 - f. Base Plant/F-line Control Room complex
 - g. Electrical Sub Station Nos. 1, 3 and 4
- 2. ExxonMobil Shop
 - 3. Stores Building and area
 - 4. Administration Building
 - 5. West Office Annex
 - 6. Quality Control Laboratory
 - 7. Buildings and area North of ExxonMobil Shop and Compressor House, to Thomas Road
 - 8. Property east of the Administration Building
 - 9. Temporary Buildings located along Avenue A to the South property line

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- a. All process, mechanical and electrical equipment from the suction pressure control valves on the primary compressors (C-101 and C-100B) to the product storage bins and blenders for "C" and D-Lines", including all FCM's and associated equipment
- b. V-2200, V-453 E & F, V-553E & F and F-Line Product Storage Bins
- c. Additive Storage Building
- d. Contract Maintenance Shop

2. Packaging & Shipping Operation

- a. All process, mechanical and electrical equipment in the P&S Building and on the P&S roof
- b. All railroad trackage, hopper cars, hopper trucks, boxcars, etc. within the plant perimeter, excluding the Chemical Unloading Area and VA Tank Car Storage Area
- c. Scrap Storage Building

3. ExxonMobil railroad cars and trackage between plant and Highway 19.**4. Electrical Sub Station Nos. 2, 5, 6 and 7**

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5. Truck weigh scales and gasoline pump area

C. E/F-Line Supervisor or Relief Supervisor (J41)

1. Entire E-Line operation from E-Line MUE Emergency Shutoff Valve
2. Waste Water Facilities
3. Initiator Mix Building
4. Chemical Storage, Chemical Unloading and VA Tank Car Storage Areas
5. Liquid Polymer Handling and Rail Loading Facilities
6. The API Separator
7. All of the area west of E-Line and south of 3rd Street, including boilers, air compressors, Demineralizer, acid and caustic storage, Mitchell Buildings and any other temporary buildings or trailers, Electrical Sub Stations Nos. 8, 9, 10, 11, 12 and 13 and the East Pellet Catcher and surrounding areas.
8. Entire F-Line operation from F-Line MUE Emergency Shutoff Valve
9. Hydrogen Truck Unloading Facility
10. Electrical Sub Station No. 14
11. C-1100F Secondary Compressor in the Base Plant Compressor House

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12. Hexene and Hexadiene Unloading and Storage Area
13. F-Line Operations Area, bounded on the North by 3rd Street, South by the F-Line Storage Bins in the Finishing Area, West by E-Line Operations, East by the Base Plant D-Reactor and Base Plant Compressor House, except for C-1100F as indicated in (4) above

VII. Initial Emergency Responsibilities and Headcount Reporting

If an emergency is declared, the following emergency personnel procedures will be executed immediately:

- A. Incident Commander (IC) - Proceeds to the scene of the emergency, if possible, and sets up the Incident Command Center (ICC). Obtains headcount of his/her people over the radio emergency channel (Channel 1) and reports the results by radio to the Emergency Communications Center.
- B. Safety Officer - Proceeds to the scene of the emergency and meets the Incident Commander. Obtains a headcount of his/her people over the radio emergency channel (Channel 1) and reports the results by radio to the Emergency Communications Center.
- C. Plastics Technicians, Affected Area - Physically report to the location of the Incident Commander unless he/she specifically directs them to another location.
- D. Shift Supervisor/Areas Not Affected - call for a head count and assume their prospective Incident Command System role.

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E. Operations Technicians of the Area Not Affected - When this is

A/B Technicians report to the Control Center

C/D Technicians report to the Control Center

E/F-Line Technicians report to the E-Line Termination Building

Note: When there is a major gas release on E-Line, no one should enter or remain in the E-Line Termination Building (old Control Room). When there is a major gas release in or near the Finishing Building, no one should enter or remain in the Finishing Building, including the Control Room. Technicians should report to the north side of the Packaging and Shipping Building.

F. Quality Control Laboratory Shift Supervisor - Report to the QC Laboratory Shift Supervisor's Office and set up the Emergency Communications Center. Announce the emergency status over the Administration Building Emergency Intercom System if the building is occupied. Obtain headcount of personnel assigned to the QC Laboratory. Assume duties as Emergency Communications Chief.

G. Quality Control Laboratory Technicians - Report to the QC Laboratory Shift Supervisor's Office and verbally inform the Supervisor of their presence.

H. QY Technician - Report to the QC Laboratory Shift Supervisor's Office to assist in the Communications Center operation. Assume duties as Assistant Communications Chief. Check sign-out boards in Administration Building and trailers.

I. Plant Manager, Department Managers - Report to the Human Resources Conference Room (Room 261) and set up the Incident Management Center (IMC). Inform Emergency Communications Chief when in operation.

J. Section Supervisors - All Non-Operations Section Supervisors and Operations Section Supervisors of non-affected areas remain in offices, on call in case their presence is needed in the Emergency Area.

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- K. Section Supervisor of the Affected Area - Reports to the Human Resources Conference Room (Room 261) and assumes the duties of Emergency Advisor (Attachment 4). Obtains cellular telephone from the Incident Command Locker before proceeding to Emergency Area. Clears entry into the Emergency Area with Incident Commander (Via cellular telephone or plant radio) prior to entry.

If the emergency is such that it may attract the attention of the community or the news media, he/she will be responsible for gathering current information on the emergency for public release through the Plant Manager.

L. Other Personnel Assigned to the Administration Building and West Office Annex

1. Salespersons, Vendors and Other Visitors - to the Administration Building - Report to the Lobby and check in with the Receptionist. Remain in the Lobby for the duration of the emergency or until given further direction from the Incident Management Center (IMC).
2. Staff Support Personnel - Remain in offices unless instructed otherwise by telephone or Emergency Intercom.
3. Personnel in the Operations Area - Return to the Administration Building immediately and report presence to the Incident Management Center (IMC), Room 261, then return to office. If unable to return to the building, report location by telephone (Ext. 448) or by radio to the Emergency Communications Center, if a telephone is not accessible.

NOTE: In the event of an emergency, it is extremely important to know the whereabouts of all personnel. Under the current system, the signout boards for Administration Building personnel entering the Operations area are vitally important keys to the organization's capability to perform effective headcounts. For this reason, personnel entering the plant must sign out on one of the boards (full name) every time and erase their names as they return to the

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building. Also, those who leave the plant site, even for a brief period, should inform at least one other individual of their absence.

M. Project Teams and Other Personnel Occupying Trailers and Temporary Buildings -

- Report to their point of entry unless other wise instructed by Incident Commander (IC) and remain there for duration of emergency.
- Those personnel whose point of entry was the main gate will report to northeast corner of the Contract Maintenance shop, inside the fence line.
- Those personnel occupying the E-Row and P-Row trailers will remain in the trailers unless otherwise instructed by Incident Commander (IC).

Section Supervisors or Team Leaders will report headcounts of work groups to the Main Gate Guard via telephone (ext. 281).

N. Safety Coordinator - Remains in office.

O. Safety Specialist - Remains in office unless Operations Chief request he/she to become the IC.

P. Environmental Coordinator - Remains in office.

Q. Industrial Hygienist Specialist - Remains in office.

R. Mechanical/Electrical Specialists - Report to the Shop Supervisor in the ExxonMobil Shop for headcount. Remain there on call near a radio and a telephone (ext. 261).

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- S. Operations Services Technicians - Physically report to their respective Supervisors in the ExxonMobil Shop for headcount. Remain there on call for the duration of the Emergency, unless directed otherwise by the Incident Commander (IC). If unable to report to the Shop, call the Supervisor on the telephone and report location.

- T. Operations Services Supervisors - Report to the ExxonMobil Shop and obtain headcounts of their respective work groups. The Shop Supervisor will gather all headcounts in the Shop and report them to the Emergency Communications Center by telephone (ext. 284).

- U. ExxonMobil Stores Specialist and Personnel - Report to the Stores Specialist's Office for headcount. The Specialist will report the headcount by telephone to the Communications Center (ext. 284).

- V. Packaging & Shipping and Contract Maintenance Supervisor/Foreman - Report to the northeast corner of the Contract Maintenance Shop, perform headcounts of their respective work groups and call the Main Gate Guard on the telephone (ext. 281) to report.

- W. Packaging & Shipping and Contract Maintenance Personnel - Report to the northeast corner of the Contract Maintenance Shop and inform respective Supervisors/Foreman of their presence.
 - 1. Contractor personnel whose point of entry was the Main Gate will assemble at the northeast corner of the Contract Maintenance Shop. Supervisor will report headcount status to the ExxonMobil Job Coordinator, who will report the status to the Main Gate Guard via telephone (ext. 281).

 - 2. Contractor personnel whose point of entry was the Construction Gate will assemble beside the Construction Gate Guard House. Supervisors will report headcount status to the Construction Gate Guard, who in turn will relay the information to the Main Gate Guard, via telephone.

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3. ExxonMobil and contract personnel occupying the P-Row and E-Row trailers will remain in their trailers. The Administrative Technician will report the head counts to the Main Gate Guard via telephone (Ext. 281).

- X. ExxonMobil Construction & Projects Supervisors and Job Coordinators - Report to the appropriate point of Contractor Personnel entry (Construction or Main Gate), assist the Contractor Supervisors with headcounts and inform Guard.

- Y. Miscellaneous Visitors, Vendors, Service personnel and Other Contractors in Plant operating Areas - Report to their point of entry and verbally inform the Guard or Receptionist of their presence.

- Z. Plant Nurse and Doctor - Remain in offices after preparing First Aid Room for potential injury victims. Report presence to the Emergency Communications Center by telephone (ext. 284).

- AA. Personnel Assigned to the West Office Annex - Remain in offices unless summoned by the Incident Management Center (IMC) or otherwise directed by the Incident Commander. Report presence to the Emergency Communications Center by telephone (X284).

- AB. Trainers, Personnel Attending Training Schools or Others Using the Operations Training Room in the West Office Annex - Remain in Training Room unless otherwise instructed by the Incident Commander (IC). Trainer or other meeting leader reports headcount to Main Gate Guard House via telephone (ext. 281).

- AC. Main Gate and Construction Gate Guards - Close gates and control traffic through them. Keep Guard Houses clear of unauthorized personnel. Main Gate Guard will report headcounts to the Emergency Communications Center by telephone (ext. 284).

Guards will report any arrival or inquiries of news media, law enforcement representatives, regulatory agencies or neighbors to the Incident Management Center (IMC), ext. 448, immediately.

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- AD. Roving Guard - Secure entry gates. Unlock First Aid Room, if after normally open hours. Assist Main Gate Guard in headcounts and traffic control. Prevent news media representatives from entering the plant. Retain them at the Main Gate or Construction Gate until management representative arrives to meet them.
- AE. Press, Radio and TV Representatives - Guard or Receptionist immediately informs the Incident Management Center (IMC) (if open) or the Incident Commander (IC) (if not) of any arrival of the news media. Guard retains them at the gate or the Receptionist retains them in the Lobby until Public Affairs representative arrives to meet them. UNDER NO CIRCUMSTANCES ARE THEY TO BE ALLOWED IN THE PLANT WITHOUT EXPLICIT AUTHORIZATION OF THE PLANT MANAGER OR HUMAN RESOURCES MANAGER. Refer to Section XIII of this Manual, "Procedures for Relations With the News Media" for additional details.

NOTES:

- On Monday through Friday, from 6:00 PM to 7:00 AM and throughout the day on Saturday and Sunday or on holidays, individuals entering, leaving or remaining in the Administration Building or Annex must inform the Main Gate Guard of their presence. In the event of an in-plant emergency, they will inform the Guard of their presence and location by telephone (ext. 281) if possible. If this is not possible, they will physically report to the Main Gate.
- All Administration Building personnel entering and leaving the plant operating areas must sign in and out on one of the two check-out boards located at the two west exits of the Administration Building. Administration Building personnel must also check in and out with the appropriate Operations Shift Supervisor before entering and leaving that area.
- Operations Services personnel working EOWEO shift on weekends and holidays and other Operations Services personnel working at night, weekends and holidays should report to the main gate guard as they arrive or leave the site. In the event of an in-plant emergency, they should report to the Main Gate Guard.

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VIII. EXTERNAL INQUIRIES AND COMMUNICATIONS

A. News Media

The Public Affairs Officer or Designated Spokesperson will normally handle all news releases. He/she should be notified of any emergency that would be of interest to the community or press and which would be of concern to employees' families. Typical questions he/she will need answered are: "What happened and when?", "Were there any injuries?", "What is the extent of the damage?".

Information for preparation of the news release will be provided from the scene through the Emergency Communications Center unless the Incident Management Center (IMC) is active. If so, the Emergency Advisor will obtain the information from the scene (Attachment 6).

If the emergency occurs after straight day schedule working hours and a news media contact is made, the Emergency Communications Center will call the Public Affairs Officer or Designated Spokesperson Digital Pager, 379-9813, then the number to be called, (977-6284), then (#) sign. If this individual fails to respond within a reasonable time, then he/she will contact one of the following individuals in the order given:

- * The Plant Manager
- * The Human Resources Manager
- * The Technical Manager
- * The Public Affairs Manager, BRCP

The telephone numbers of these individuals are included in the Emergency Callout List in the front of this Manual.

NOTE: Any time the Hotline is called, the News Media is automatically notified. For this reason, the Company Spokesperson should be informed immediately any time the Hotline is called.

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B. Neighborhood Inquiries

All inquiries from neighbors are to be referred to the Public Affairs Officer (PAO) (Human Resources Department Manager). If the calls come in after straight day schedule hours, the Emergency Communications Center should immediately contact the PAO or the Designated Spokesperson Digital Pager as in (A) above.

Calls will normally come into the Receptionist's Office (During straight day hours) or the Main Gate Guard House (After straight Days hours). Calls coming in after straight day hours should be transferred to QC41, ext. 284, who in turn should contact the PAO or the Designated Spokesperson Digital Pager as outlined in (A) above.

C. Community Emergency Response Agencies

If the emergency is evaluated Severity Level 2 or 3, it may be necessary to seek external assistance for containment. Examples would be a serious chemical storage tank fire, a rail tank car fire, an initiator storage building fire or a fire in the Administration Building or P&S Building. These are situations for which the workforce is not trained to combat and external assistance will be needed to handle the fire and to control traffic and communicate with the neighborhood.

1. BRCP Emergency Response Organization

The primary responder for fire control in situations mentioned above should be the BRCP Emergency Response Organization. Response time for their services is in the neighborhood of twenty-five minutes and emergency containment should be planned with this in mind. Capabilities provided by this organization include:

- Primary Fire Squads (BRPP equivalent)
- Volunteer Fire Squad - Internal structure and tank fire fighting capability
- Rescue Squad
- HAZMAT Team

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Other services include an E-Med Team (Medical team with EMT's), an ambulance, Industrial Hygiene support, Security and Public Affairs support. Assistance from this organization can be obtained by calling the BRCP Shift Superintendent. The telephone number is listed in the Emergency Callout List in the front of this Manual.

2. Other Assistance

Other assistance that may be required during an emergency includes traffic control, high-rise rescue (electrical shock or heart attack), medical assistance and chemical leak containment. All these services, utilizing the Sheriff's Department, the EBR Parish Fire Department (High-rise rescue, fire fighting and HAZMAT) and EMS can be obtained by dialing 911 from any telephone.

The Incident Commander (IC) will make the determination of whether or not external assistance is required. He will request the aid from the Emergency Communications Chief. This protocol is necessary because if external assistance is required, the Incident Commander (IC) will have to make some decisions as to who else to call, what the community impact will be and arrange for coordination of the agencies as they begin to arrive.

IX. **HOTLINE NOTIFICATION SYSTEM**

Federal and State laws require that process events must be reported to certain community agencies if they meet certain criteria. The installation of the Hotline makes the initial reporting to these agencies faster and easier. In addition, neighborhood disturbances prompt many calls to the authorities and it makes their job, and ours, easier if they are armed with the facts to put the local citizens at ease.

Extraordinary events which should be reported fall in the category of unusual noise, polymer releases, fire, unusual flaring, or major liquid chemical spills or vapor releases. When it has been determined that a Hotline call is needed, it should be made within ten minutes of the incident. Some examples of these events are:

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- A. Reactor or recycle dumps which may cause a heavy gas release (See Section VIII of this Manual), a settling of polymer fines/fluff in the neighborhood or exceptional noise, such as an aerial decomp, which may disturb the neighborhood, even breaking windows.
- B. Chemical storage tank, tank car or tank truck fires and/or explosions.
- C. Initiator/Catalyst Storage Area fire or explosion.
- D. Major liquid chemical spills or vapor releases from large storage vessels, tank trucks or tank cars. Noxious or irritating vapor releases that may cross the fence line.

Agencies, such as the Sheriff's Department, Louisiana State Police, Fire Department, Mutual Aid, the EBR HAZMAT Unit and the Louisiana Department of Environmental Quality (DEQ) should be notified (in addition to the appropriate BRPP Management personnel) by the Emergency Communications Chief or his/her delegate. The individual telephone numbers for these agencies are listed in the Emergency Callout List located in the front of this Manual.

Incoming calls from other member plants or organizations will be received on the Hotline Telephone located in the Main Gate Guard House. The Guard will relay these calls to P41, who will take any necessary action deemed appropriate.

The agencies can be notified quickly through the Hotline System, as described below:

- 1. Member Organizations
 - a. Baker City Police
 - b. EBR Sheriff

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- c. Mutual Aid (BRFD)
- d. North Baton Rouge Emergency Task Force (NBRETF) Members
- e. Southern University
- f. West Baton Rouge Parish Sheriff's Office

2. Purpose

Quick notification of the area plants and governmental agencies of any situation which may be cause for concern to the community, such as a process upset that may cause a neighborhood disturbance or become life-threatening.

The technique to inform these organizations of an incident must meet certain criteria. The message must be brief but descriptive enough so each organization can respond appropriately. The logic must be clear and simple enough to be easily taught to personnel who will be responsible for transmitting and receiving information.

There are three types of incident classifications: Level 1 for an unusual event, Level 2 for a site emergency and Level 3 for general emergencies.

Attachments 1 and 2 format the system and further explains how it works.

Once a facility initiates a call, the informant (typically, the Emergency Communications Chief or Assistant) will wait approximately 10 seconds to inform these organizations of the applicable code message. The wind direction and material involved should follow. Once the roll call is completed, the caller deactivates, hangs up, as do all locations called. After the incident is resolved, the caller will call an "All-Clear" to the same participating members. Once again, a second call is transmitted to validate the "All-Clear".

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NOTES:

- The "Roll Call" is used when member plants and organizations are called. Members respond to the roll call as their names are called. This gives the calling company a record of those who did in fact receive the call.
- Toxic Gas: Any gas or vapor which is acutely harmful to the human body. Toxics usually affect the cardiovascular, nervous or respiratory systems, or a combination. Examples are chlorine, carbon monoxide, phosgene and ammonia.

HOTLINE NOTIFICATION SYSTEM

TO ACTIVATE

Use Attachment 1 and 2 and follow instructions.

PARTY RECEIVING A CALL

1. Pick up telephone - listen to message.
2. Do not verbally acknowledge at this time - wait for roll call.
3. Write the message down
4. Acknowledge BRPP for roll-call, using roster number.
5. Hang up at the end of the roll call

X. Other Required Notifications

A. Environmental Spill or Release Reporting

The State Police requires notification within one hour of the identification of a reportable spill or release which meets certain criteria. Other agency notification (e.g. Louisiana Department of Environmental Quality (DEQ), the National Response Center, Fire Dept., etc.) should immediately follow the State Police notification as appropriate. Section VIII of this manual details the reporting requirements. Telephone numbers of Environmental contacts are listed in the Emergency Callout List at the front of this manual.

Section VIII of this Manual provides a list of typical ethylene releases which can be used for initial reporting, as appropriate.

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SUBJECT: EMERGENCY ORGANIZATION**B. Neighborhood Damage Reporting**

If neighborhood damage due to an explosion is suspected or confirmed, one of the following individuals should be notified immediately. Use the order given:

- Human Resources Manager
- Safety Coordinator
- Environmental Coordinator

The telephone numbers for these individuals are listed in the Emergency Callout List at the front of this Manual.

C. News Media Inquiries

In the event an incident is significant enough to prompt calls from the News Media, it is important to contact immediately one or more of the following individuals, in the order given:

- PAO or Designated Spokesperson, Digital Pager
- Plant Manager
- Human Resources Department Manager
- Operations Department Manager
- Technical & Business Services Department Manager

The telephone numbers for these individuals are listed in the Emergency Callout List at the front of this Manual.

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D. Other Inquiries

State law allows a Louisiana State Trooper to enter any industrial site if he/she has reason to believe the event is a danger to human life. It is not advisable to try to prevent or delay a Trooper from entering if he/she is insistent but the following precautions should be taken:

1. Request that the Trooper make certain his revolver is secure in its holster.
2. Any visitor should have a full-time Company employee escort; in this case, a permanent Supervisor.
3. Contact the PAO, the Designated Spokesperson or the Operations Department Manager immediately.

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DOCUMENT HISTORY

.....
REVISION: 16

DESCRIPTION OF CHANGE(S):

Re-wording of agency notification to 1 hour - Section X - Item A - 1st paragraph. (MOC#6017)

APPROVALS:

Section Owner:	T. L. Fabre	Date:	06/05/02
Manual Owner:	T. L. Fabre	Date:	06/05/02

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REVISION: 15

DESCRIPTION OF CHANGE(S):

Revise Section VII, H add sentence "check sign-out boards in Administration Bldg. and trailers." (MOC#5873)

APPROVALS:

Section Owner:	T. L. Fabre	Date:	02/13/02
Manual Owner:	T. L. Fabre	Date:	02/13/02

.....
REVISION: 14












DESCRIPTION OF CHANGE(S):

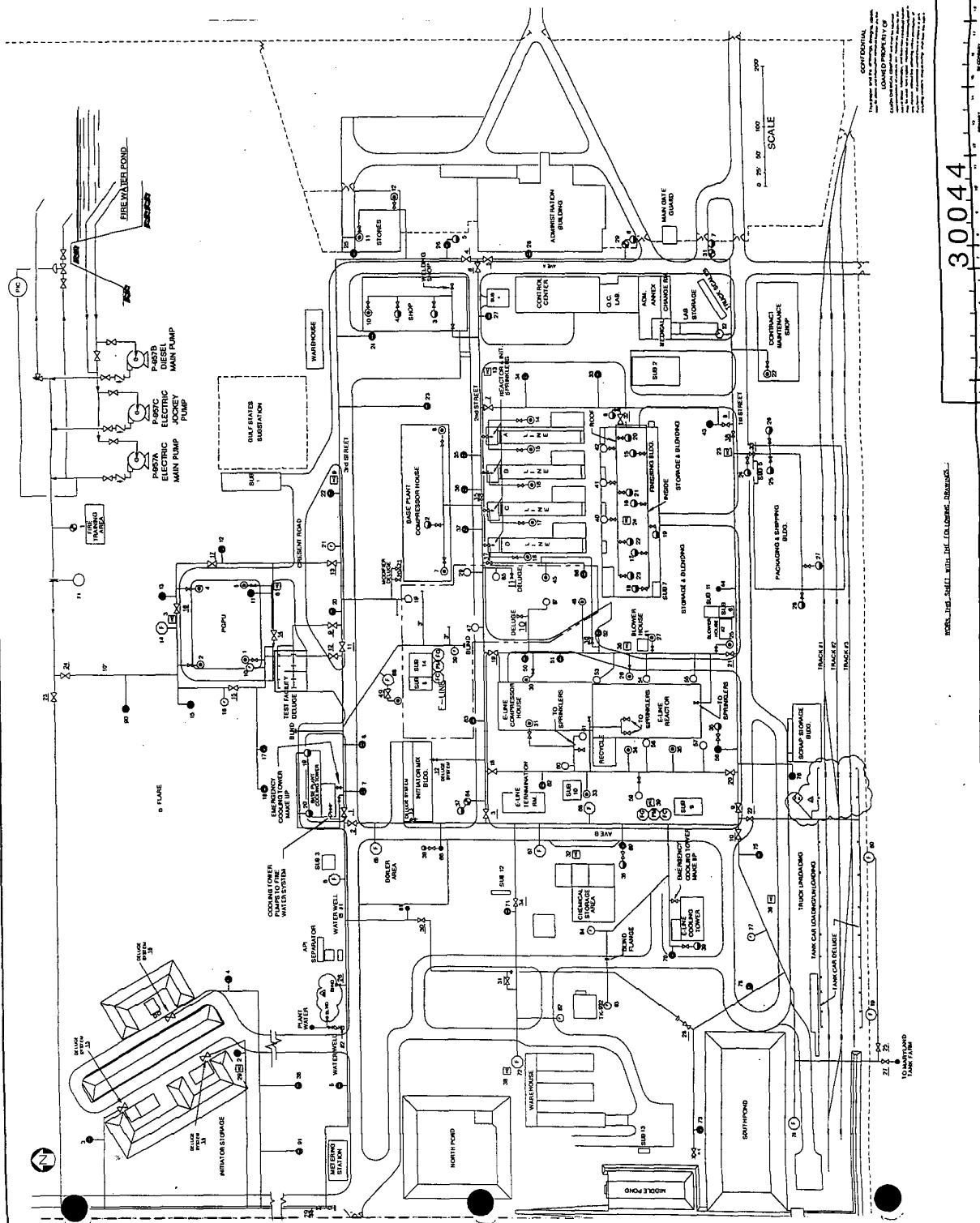
No evident of this MOC being completed. Install a radio based alarm system, consisting of 3 outdoor speaker towers, multiple strobe lights and indoor PA speakers. (MOC1031).

APPROVALS:

Section Owner:	T. L. Fabre	Date:	10/02/01
Manual Owner:	T. L. Fabre	Date:	10/02/01

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- | | |
|---|--------------------------------|
|  | FIRE HYDRANT WITH MONITOR |
|  | FIRE HYDRANT |
|  | MONITOR ONLY |
|  | HOSE STATION |
|  | HOSE REEL |
|  | HOSE CART |
|  | FOAM MONITOR |
|  | FIRE HYDRANT WITH FOAM MONITOR |
|  | FOAM CHART |
|  | PORTABLE MONITOR |
|  | FOAM GENERATOR |

[illegible]

EXXON CHEMICAL COMPANY

PLOT PLAN
FIRE WATER LOOP
SCHEMATIC

30044

under the staff with the following drawings:

APPENDIX H

LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT



PERMIT NUMBER
LA0005355
AI No.: 285

OFFICE OF ENVIRONMENTAL SERVICES Water Discharge Permit

Pursuant to the Clean Water Act, as amended (33 U.S.C. 1251 et seq.), and the Louisiana Environmental Quality Act, as amended (La. R. S. 30:2001 et seq.), rules and regulations effective or promulgated under the authority of said Acts, and in reliance on statements and representations heretofore made in the application, a Louisiana Pollutant Discharge Elimination System permit is issued authorizing

ExxonMobil Chemical Company
Baton Rouge Plastics Plant
Post Office Box 1607
Baton Rouge, Louisiana 70821-1607

Type Facility: Low Density Polyethylene manufacturer

Location: 11675 Scotland Avenue
East Baton Rouge Parish

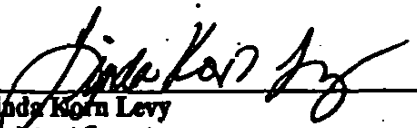
Receiving Waters: Baton Rouge Harbor Canal via Fortune Bayou (Outfalls 001 & 004);
Comite River via Cypress Bayou (Outfall 002); and Monte Sano Bayou
(Outfall 003)

to discharge in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, and III attached hereto.

This permit shall become effective on March 1, 2003

This permit and the authorization to discharge shall expire five (5) years from the effective date of the permit.

Issued on February 11, 2003


Linda Korn Levy
Assistant Secretary

PART I

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Permit No. LA0005355

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 001, the continuous discharge of process wastewater, process area stormwater, process area washwater, boiler blowdown, cooling tower blowdown, discharges from fire training activities, eyewash stations, safety showers, uncontaminated groundwater from monitoring activities, compressor condensate, steam condensate, general facility washwaters where no detergents are used and no spills or leaks of hazardous materials have occurred (unless all spilled material has been removed), hydrostatic test water(4) and wash wastewater from the wastewater treatment facility. (estimated flow is 2.23 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (ug/L; UNLESS STATED)		Measurement Frequency	Sample Type
CONVENTIONAL AND NONCONVENTIONAL		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*1)	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*1)	---	---	Continuous	Recorder
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report (Min)	Report (Max)	Continuous	Recorder
BOD ₅	00310	591	1322	---	---	1/week	24-hr. Composite
TSS	00530	976	2555	---	---	1/week	24-hr. Composite
COD	70027	2382	4198	---	---	1/week	24-hr. Composite
Oil and Grease	03582	254	381	---	---	1/week	24-hr. Composite
VOLATILE COMPOUNDS(*2)							
Acrylonitrile	34215	1.43	3.52	---	---	1/year	24-hr. Composite
Benzene	34030	0.87	2.03	---	---	1/year	24-hr. Composite
Carbon Tetrachloride	32102	0.10	0.24	---	---	1/year	24-hr. Composite
Chlorobenzene	34301	2.16	5.77	---	---	1/year	24-hr. Composite
Chloroethane	34311	1.67	4.48	---	---	1/year	24-hr. Composite
Chloroform	32106	1.68	4.93	---	---	1/year	24-hr. Composite
1,1-Dichloroethane	34496	0.33	0.90	---	---	1/year	24-hr. Composite
1,2-Dichloroethane	34531	0.57	1.37	---	---	1/year	24-hr. Composite
1,1-Dichloroethylene	34501	0.05	0.12	---	---	1/year	24-hr. Composite
1,2-trans-Dichloroethylene	34546	0.38	1.00	---	---	1/year	24-hr. Composite
1,2-Dichloropropane	34541	2.98	12.05	---	---	1/year	24-hr. Composite
1,3-Dichloropropylene	34561	2.98	12.05	---	---	1/year	24-hr. Composite
Ethylbenzene	34371	2.16	5.77	---	---	1/year	24-hr. Composite
Methyl Chloride	34418	1.67	4.48	---	---	1/year	24-hr. Composite

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AI No. 285

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 001 continued)

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (ug/L, UNLESS STATED)		Measurement Frequency	Sample Type
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Methylene Chloride	34423	0.55	2.58	---	---	1/year	24-hr. Composite
Tetrachloroethylene	34475	0.21	0.50	---	---	1/year	24-hr. Composite
Toluene	34010	0.43	1.12	---	---	1/year	24-hr. Composite
1,1,1-Trichloroethane	34506	0.33	0.90	---	---	1/year	24-hr. Composite
1,1,2-Trichloroethane	34511	0.49	1.39	---	---	1/year	24-hr. Composite
Trichloroethylene	39180	0.39	1.05	---	---	1/year	24-hr. Composite
Vinyl Chloride	39175	1.47	2.61	---	---	1/year	24-hr. Composite
ACID COMPOUNDS(*2)							
2,4-Dimethylphenol	34606	0.29	0.71	---	---	1/year	24-hr. Composite
4,6-Dinitro-o-Cresol	34657	1.18	4.20	---	---	1/year	24-hr. Composite
2,4-Dinitrophenol	34616	18.32	65.13	---	---	1/year	24-hr. Composite
2-Nitrophenol	34591	0.99	3.51	---	---	1/year	24-hr. Composite
4-Nitrophenol	34646	2.46	8.74	---	---	1/year	24-hr. Composite
Phenol	34694	0.29	0.71	---	---	1/year	24-hr. Composite
BASE NEUTRAL COMPOUNDS(*2)							
Acenaphthene	34205	0.29	0.71	---	---	1/year	24-hr. Composite
Acenaphthylene	34200	0.29	0.71	---	---	1/year	24-hr. Composite
Anthracene	34220	0.29	0.71	---	---	1/year	24-hr. Composite
Benzo(a)anthracene	34526	0.29	0.71	---	---	1/year	24-hr. Composite
Benzo(a)pyrene	34247	0.30	0.73	---	---	1/year	24-hr. Composite
3,4-Benzofluoranthene	34230	0.30	0.73	---	---	1/year	24-hr. Composite
Benzo(k)fluoranthene	34242	0.29	0.71	---	---	1/year	24-hr. Composite
Bis(2-ethylhexyl)phthalate	39100	1.44	3.92	---	---	1/year	24-hr. Composite
Chrysene	34320	0.29	0.71	---	---	1/year	24-hr. Composite
1,2-Dichlorobenzene	34536	2.98	12.05	---	---	1/year	24-hr. Composite
1,3-Dichlorobenzene	34566	2.16	5.77	---	---	1/year	24-hr. Composite
1,4-Dichlorobenzene	34571	2.16	5.77	---	---	1/year	24-hr. Composite
Diethyl phthalate	34336	0.70	1.72	---	---	1/year	24-hr. Composite
Dimethyl phthalate	34341	0.29	0.71	---	---	1/year	24-hr. Composite
Di-n-butyl phthalate	39110	0.30	0.65	---	---	1/year	24-hr. Composite
Fluoranthene	34376	0.33	0.82	---	---	1/year	24-hr. Composite
Fluorene	34381	0.29	0.71	---	---	1/year	24-hr. Composite
Hexachlorobenzene	39700	0.000021	0.00005	---	---	1/year	24-hr. Composite
Hexachlorobutadiene	34391	0.0093	0.0221	---	---	1/year	24-hr. Composite
Hexachloroethane	34396	2.98	12.05	---	---	1/year	24-hr. Composite
Naphthalene	34696	0.29	0.71	---	---	1/year	24-hr. Composite
Nitrobenzene	34447	33.95	97.17	---	---	1/year	24-hr. Composite
Phenanthrene	34461	0.29	0.71	---	---	1/year	24-hr. Composite

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 AI No. 285

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 001 continued)

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (ug/L, UNLESS STATED)		Measurement Frequency	Sample Type
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Pyrene	34469	0.30	0.73	---	---	1/year	24-hr. Composite
1,2,4-Trichlorobenzene	34551	2.98	12.05	---	---	1/year	24-hr. Composite
<u>WHOLE EFFLUENT (CHRONIC)</u>		(Percent %, UNLESS STATED)					
<u>TOXICITY TESTING</u>		STORET Code		Monthly Avg Minimum	7-Day Minimum	Measurement Frequency (#3)	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, <u>Pimephales promelas</u>	TLP6C	---	---	Report	Report	1/Quarter	24-hr. Composite
NOEC, Value [X], Lethality, Static Renewal, <u>Pimephales promelas</u>	TOP6C	---	---	Report	Report	1/Quarter	24-hr. Composite
NOEC, Value [X], Growth, Static Renewal, <u>Pimephales promelas</u>	TPP6C	---	---	Report	Report	1/Quarter	24-hr. Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, <u>Pimephales promelas</u>	TGP6C	---	---	Report	Report	1/Quarter	24-hr. Composite
NOEC, Value [X], Coefficient of Variation, Static Renewal, <u>Pimephales promelas</u>	TQP6C	---	---	Report	Report	1/Quarter	24-hr. Composite
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, <u>Ceriodaphnia dubia</u>	TLP38	---	---	Report	Report	1/Quarter	24-hr. Composite
NOEC, Value [X], Lethality, Static Renewal, <u>Ceriodaphnia dubia</u>	TOP38	---	---	Report	Report	1/Quarter	24-hr. Composite
NOEC, Value [X], Reproduction, Static Renewal, <u>Ceriodaphnia dubia</u>	TPP38	---	---	Report	Report	1/Quarter	24-hr. Composite
NOEC, Pass/Fail [0/1], Reproduction, Static Renewal, <u>Ceriodaphnia dubia</u>	TGP38	---	---	Report	Report	1/Quarter	24-hr. Composite
NOEC, Value [X], Coefficient of Variation, Static Renewal, 7-Day Chronic, <u>Ceriodaphnia dubia</u>	TQP38	---	---	Report	Report	1/Quarter	24-hr. Composite

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 001 continued)

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 001, at the point of discharge from the final effluent basin at the wastewater treatment system prior to combining with any other waters from Outfall 004 and the waters of the unnamed, manmade drainage conveyance leading to the Baton Rouge Harbor Canal.

FOOTNOTE(S):

- (*1) The pH shall be within the range of 6.0 -- 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.J.
- (*2) See Part II.K.
- (*3) See Part II.P.4, Monitoring Frequency Reduction.
- (*4) The Outfall 105H monitoring requirements and effluent limitations for hydrostatic test water do not apply to hydrostatic test water discharged through the wastewater treatment system and Outfall 001.

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 002, the intermittent discharge of fire system test water, discharges from fire training activities, eyewash stations, safety showers, uncontaminated groundwater from monitoring activities, incidental windblown mist from cooling towers (not including intentional discharges from piped cooling tower blowdown or drains), steam trap blowdown, steam condensate blowdown/overflow, compressor condensate, general facility washwaters where no detergents are used and no spills or leaks of hazardous materials have occurred (unless all spilled material has been removed), previously tested hydrostatic test water, once-through non-contact cooling water, well water, and non-process area stormwater from the administration building area and employee parking lots.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Measurement Frequency(*1)	Sample Type
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow-MGD	50050	Report	Report	---	---	1/quarter	Estimate
TDC	00680	---	---	---	50	1/quarter	Grab
Oil and Grease	03582	---	---	---	15	1/quarter	Grab
pH Minimum/Maximum Values (Standard Units)	00400	---	---	6.0 (*2) (Min)	9.0 (*2) (Max)	1/quarter	Grab

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 002, at the point of discharge from the eastern edge of the facility under the Illinois Central railroad tracks prior to combining with the waters of an unnamed ditch, thence to Cypress Bayou.

FOOTNOTE(S):

(*1) When discharging.

(*2) The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous pH values measured.

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 003, the intermittent discharge of low contamination potential stormwater runoff and previously tested hydrostatic test water from the contractor parking lot.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		(mg/L, UNLESS STATED)		Measurement Frequency(*1)	Sample Type
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow-MGD	50050	Report	Report	---	---	1/quarter	Estimate
TOC	00680	---	---	---	50	1/quarter	Grab
Oil and Grease	03582	---	---	---	15	1/quarter	Grab
pH Minimum/Maximum Values (Standard Units)	00400	---	---	6.0 (*2) (Min)	9.0 (*2) (Max)	1/quarter	Grab

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 003, at the point of discharge at the southeast corner of the facility prior to combining with the waters of an unnamed drainage ditch, thence to Monte Sano Bayou.

FOOTNOTE(S):

(*1) When discharging.

(*2) The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous pH values measured.

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 004, the intermittent discharge of fire systems test water, discharges from fire training activities, eyewash stations, safety showers, uncontaminated groundwater from monitoring activities, incidental windblown mist from cooling towers (not including intentional discharges from piped cooling tower blowdown or drains), steam trap blowdown, steam condensate blowdown/overflow, compressor condensate, general facility washwaters where no detergents are used and no spills or leaks of hazardous materials have occurred (unless all spilled material has been removed), previously tested hydrostatic test water, once-through non-contact cooling water, well water, and non-process area stormwater from areas surrounding the warehouses and outside of the process area stormwater collection dikes.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	STOREY Code	Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Measurement Frequency(*1)	Sample Type
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow-MED	50050	Report	Report	---	---	1/quarter	Estimate
TOC	00680	---	---	---	50	1/quarter	Grab
Oil and Grease	03582	---	---	---	15	1/quarter	Grab
pH Minimum/Maximum Values (Standard Units)	00400	---	---	6.0 (*2) (Min)	9.0 (*2) (Max)	1/quarter	Grab

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 004, at the point of discharge from the storm water culvert located west of Outfall 001 before commingling with any water from Outfall 001 and prior to combining with the waters of the unnamed, manmade drainage conveyance leading to the Baton Rouge Harbor Canal.

FOOTNOTE(S):

(*1) When discharging.

(*2) The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous pH values measured.

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 105H, the intermittent discharge of hydrostatic test water prior to commingling with other water or storm water for discharge through Outfalls 002, 003, and 004.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		Other Units (lbs/day, UNLESS STATED)		(mg/L, UNLESS STATED)		Measurement Frequency(*1)	Sample Type
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow-MGD	50050	Report	Report	---	---	1/event	Estimate
TSS(*2)	00530	---	---	---	90	1/event	Grab
Oil and Grease	03582	---	---	---	15	1/event	Grab
TOC(*3)	00680	---	---	---	50	1/event	Grab
Benzene(*3)	34030	---	---	---	50 µg/L	1/event	Grab
Total BTEX(*3 & 4)	49491	---	---	---	250 µg/L	1/event	Grab
Total Lead (*3)	01051	---	---	---	50 µg/L	1/event	Grab
pH Minimum/Maximum Values (Standard Units)	00400	---	---	6.0 (*5) (Min)	9.0 (*5) (Max)	1/event	Grab

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 105H, at the point of discharge from the vessel or pipeline being tested prior to combining with any other waters. Hydrostatic test water tested for discharge in accordance with the requirements and in compliance with the effluent limitations for Outfall 105H may be discharged through Outfalls 002, 003, and 004.

FOOTNOTE(S):

(*1) When discharging.

(*2) The background concentration of Total Suspended Solids (TSS) will be allowed in the discharge of the effluent is being returned to the same source from which the intake water was obtained. In these cases, the permit limitations will be 90 mg/L plus the concentration of TSS in the intake water. The TSS concentration of the intake water shall be reported on the Discharge Monitoring Report (DMR) along with the concentration of TSS in the effluent.

(*3) Total Organic Carbon (TOC) shall be measured on discharges from facilities which have previously been in service; i.e., those facilities which are not new. Benzene, Total BTEX, and Lead shall be measured on discharges from pipelines or vessels which have been used for the storage or transportation of liquid or gaseous petroleum hydrocarbons. Accordingly, Flow, TSS, Oil and grease, and pH are the only testing requirements for new pipe or vessels.

(*4) BTEX shall be measured as the sum of benzene, toluene, ethylbenzene, and total xylene (including ortho-, meta-, and para-xylene) as quantified by EPA methods 601, 602, 624, or 1624.

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OTHER REQUIREMENTS

In addition to the standard conditions required in all permits and listed in Part III, the Office has established the following additional requirements in accordance with the Louisiana Water Quality Regulations.

- A. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations or additional restrictions, if necessary, to maintain the water quality integrity and the designated uses of the receiving water bodies.
- B. This permit does not in any way authorize the permittee to discharge a pollutant not listed or quantified in the application or limited or monitored for in the permit.
- C. Authorization to discharge pursuant to the conditions of this permit does not relieve the permittee of any liability for damages to state waters or private property. For discharges to private land, this permit does not relieve the permittee from obtaining proper approval from the landowner for appropriate easements and rights of way.
- D. For definitions of monitoring and sampling terminology see Part III, Section F.
- E. LABORATORY ACCREDITATION
 1. Laboratory procedures and analyses performed by commercial laboratories shall be in accordance with the requirements set forth under LAC 33:I. Subpart 3, Chapters 49-55.
 2. Laboratory data generated by commercial laboratories that are not accredited under LAC 33:I. SUBPART 3, 47-57, will not be accepted by LDEQ. Retesting of analysis will be required by an accredited commercial laboratory. When retesting of effluent is not possible (i.e., data reported DMR's for prior month's sampling), the data generated will be considered invalid and in violation of the LPDES permit.
 3. Regulations on the Environmental Laboratory Accreditation Program and a list of labs that have applied for accreditation are available on the LDEQ website located at www.deq.state.la.us/lelap/. Questions concerning this program may be directed to (225) 765-0741.
 4. DEFINITIONS
 - a. "Accreditation" means the formal recognition by the department of a laboratory's competence wherein a specific test or types of tests can be accurately and successfully performed in compliance with all the minimum requirements set forth in the regulations regarding laboratory accreditation.
 - b. "Commercial Laboratory" means any laboratory that performs analyses for third parties for a fee or other compensation, except

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those commercial laboratories accredited by the Department of Health and Hospitals in accordance with R.S.49:1001 et seq.

F. 24-HOUR ORAL REPORTING: DAILY MAXIMUM LIMITATION VIOLATIONS

Under the provisions of Part III.D.6.e.(3) of this permit, violations of daily maximum limitations for the following pollutants shall be reported orally to the Office of Environmental Compliance within 24 hours from the time the permittee became aware of the violation followed by a written report in five days.

VOLATILE COMPOUNDS

Acrylonitrile
Benzene
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethylene
1,2-trans-Dichloroethylene
1,2-Dichloropropane
1,3-Dichloropropylene
Ethylbenzene
Methyl Chloride
Methylene Chloride
Tetrachloroethylene
Toluene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethylene
Vinyl Chloride

ACID COMPOUNDS

2,4-Dimethylphenol
4,6-Dinitro-o-cresol
2,4-Dinitrophenol
2-Nitrophenol
4-Nitrophenol
Phenol

BASE NEUTRAL COMPOUNDS

Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
3,4-Benzofluoranthene
Benzo(k)fluoranthene
Bis(2-ethylhexyl)phthalate
Chrysene

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1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachloroethane
Naphthalene
Nitrobenzene
Phenanthrene
Pyrene
1,2,4-Trichlorobenzene

G. COMPOSITE SAMPLING (24-HOUR)1. STANDARD PROVISIONS

Unless otherwise specified in this permit, the term "24-hour composite sample" means a sample consisting of a minimum of four (4) aliquots of effluent collected at regular intervals over a normal 24-hour operating day and combined in proportion to flow or a sample continuously collected in proportion to flow over a normal 24-hour operating period.

2. VOLATILE COMPOUNDS

For the "24-hour composite" sampling of volatile compounds using EPA Methods 601, 602, 603, 624, 1624; or any other 40 CFR Part 136 (See LAC 33:IX.2531) method approved after the effective date of the permit, the permittee shall manually collect four (4) aliquots (grab samples) in clean zero head-space containers at regular intervals during the actual hours of discharge during the 24-hour sampling period using sample collection, preservation, and handling techniques specified in the test method. These aliquots must be combined in the laboratory to represent the composite sample of the discharge. One of the following alternative methods shall be used to composite these aliquots.

- a. Each aliquot is poured into a syringe. The plunger is added, and the volume in the syringe is adjusted to 1-1/4 ml. Each aliquot (1-1/4 ml.) is injected into the purging chamber of the purge and trap system. After four (4) injections (total 5 ml.), the chamber is purged. Only one analysis or run is required since the aliquots are combined prior to analysis.
- b. Chill the four (4) aliquots to 4 Degrees Centigrade. These aliquots must be of equal volume. Carefully pour the contents of each of the four aliquots into a 250-500 ml. flask which is chilled in a wet ice bath. Stir the mixture gently with a clean glass rod while in the ice bath. Carefully fill two (2) or more

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clean 40 ml. zero head-space vials from the flask and dispose of the remainder of the mixture. Analyze one of the aliquots to determine the concentration of the composite sample. The remaining aliquot(s) are replicate composite samples that can be analyzed if desired or necessary.

- c. Alternative sample compositing methods may be used following written approval by this Office.

The individual samples resulting from the application of these compositing methods shall be analyzed following the procedures specified for the selected test method. The resulting analysis shall be reported as the daily composite concentration.

As an option to the above compositing methods, the permittee may manually collect four (4) aliquots (grab samples) in clean zero head-space containers at regular intervals during the actual hours of discharge during the 24-hour sampling period using sample collection, preservation, and handling techniques specified in the test method. A separate analysis shall be conducted for each discrete grab sample following the approved test methods. The determination of daily composite concentration shall be the arithmetic average (weighted by flow) of all grab samples collected during the 24-hour sampling period.

H. 40 CFR PART 136 (See LAC 33:IX.2531) ANALYTICAL REQUIREMENTS

Unless otherwise specified in this permit, monitoring shall be conducted according to analytical, apparatus and materials, sample collection, preservation, handling, etc., procedures listed at 40 CFR Part 136, and in particular, Appendices A, B, and C (See LAC 33:IX.2531).

I. FLOW MEASUREMENT "ESTIMATE" SAMPLE TYPE

If the flow measurement sample type in Part I is specified as "estimate", flow measurements shall not be subject to the accuracy provisions established at Part III.C.6 of this permit. The daily flow value may be estimated using best engineering judgement.

J. pH RANGE EXCURSION PROVISIONS

Where a permittee continuously measures the pH of wastewater as a requirement or option in a Louisiana Pollutant Discharge Elimination System (LPDES) permit, the permittee shall maintain the pH of such wastewater within the range set forth in the permit, except that excursions from the range are permitted, provided:

1. The total time during which the pH values are outside the required range of pH values shall not exceed 446 minutes in any calendar month, and

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2. No individual excursion from the range of pH values shall exceed 60 minutes.

For the purposes of this section, an "excursion" is an unintentional and temporary incident in which the pH value of discharge wastewater exceeds the range set forth in the permit.

K. MINIMUM QUANTIFICATION LEVEL (MQL)

If any individual analytical test result is less than the minimum quantification level listed below, a value of zero (0) may be used for that individual result for the Discharge Monitoring Report (DMR) calculations and reporting requirements.

<u>NONCONVENTIONAL</u>	<u>MQL (ug/L)</u>
Phenolics, Total Recoverable (4AAP)	5
Chlorine (Total Residual)	100
3-Chlorophenol	10
4-Chlorophenol	10
2,3-Dichlorophenol	10
2,5-Dichlorophenol	10
2,6-Dichlorophenol	10
3,4-Dichlorophenol	10
2,4-D	10
2,4,5-TP (Silvex)	4

<u>METALS AND CYANIDE</u>	<u>MQL (ug/L)</u>
Antimony (Total)	60
Arsenic (Total)	10
Beryllium (Total)	5
Cadmium (Total)	1
Chromium (Total)	10
Chromium (3+)	10
Chromium (6+)	10
Copper (Total)	10
Lead (Total)	5
Mercury (Total)	0.2
Molybdenum (Total)	30
Nickel (Total) Freshwater	40
Nickel (Total) Marine	5
Selenium (Total)	5
Silver (Total)	2
Thallium (Total)	10
Zinc (Total)	20
Cyanide (Total)	20

<u>DIOXIN</u>	<u>MQL (ug/L)</u>
2,3,7,8-TCDD	0.00001

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VOLATILE COMPOUNDS

	<u>MOL (µg/L)</u>
Acrolein	50
Acrylonitrile	50
Benzene	10
Bromoform	10
Carbon Tetrachloride	10
Chlorobenzene	10
Chlorodibromomethane	10
Chloroethane	50
2-Chloroethylvinylether	10
Chloroform	10
Dichlorobromomethane	10
1,1-Dichloroethane	10
1,2-Dichloroethane	10
1,1-Dichloroethylene	10
1,2-Dichloropropane	10
1,3-Dichloropropylene	10
Ethylbenzene	10
Methyl Bromide [Bromomethane]	50
Methyl Chloride [Chloromethane]	50
Methylene Chloride	20
1,1,2,2-Tetrachloroethane	10
Tetrachloroethylene	10
Toluene	10
1,2-trans-Dichloroethylene	10
1,1,1-Trichloroethane	10
1,1,2-Trichloroethane	10
Trichloroethylene	10
Vinyl Chloride	10

ACID COMPOUNDS

	<u>MOL (µg/L)</u>
2-Chlorophenol	10
2,4-Dichlorophenol	10
2,4-Dimethylphenol	10
4,6-Dinitro-o-Cresol [2-Methyl-4,6-Dinitrophenol]	50
2,4-Dinitrophenol	50
2-Nitrophenol	20
4-Nitrophenol	50
p-Chloro-m-Cresol [4-Chloro-3-Methylphenol]	10
Pentachlorophenol	50
Phenol	10
2,4,6-Trichlorophenol	10

BASE/NEUTRAL COMPOUNDS

	<u>MOL (µg/L)</u>
Acenaphthene	10
Acenaphthylene	10
Anthracene	10
Benzidine	50
Benzo (a) anthracene	10
Benzo (a) pyrene	10
3,4-Benzofluoranthene	10
Benzo (ghi) perylene	20

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Benzo(k) fluoranthene	10
Bis(2-chloroethoxy) Methane	10
Bis(2-chloroethyl) Ether	10
Bis(2-chloroisopropyl) Ether	10
Bis(2-ethylhexyl) Phthalate	10
4-Bromophenyl Phenyl Ether	10
Butylbenzyl Phthalate	10
2-Chloronaphthalene	10
4-Chlorophenyl Phenyl Ether	10
Chrysene	10
Dibenzo(a,h) anthracene	20
1,2-Dichlorobenzene	10
1,3-Dichlorobenzene	10
1,4-Dichlorobenzene	10
3,3'-Dichlorobenzidine	50
Diethyl Phthalate	10
Dimethyl Phthalate	10
Di-n-Butyl Phthalate	10
2,4-Dinitrotoluene	10
2,6-Dinitrotoluene	10
Di-n-octyl Phthalate	10
1,2-Diphenylhydrazine	20
Fluoranthene	10
Fluorene	10
Hexachlorobenzene	10
Hexachlorobutadiene	10
Hexachlorocyclopentadiene	10
Hexachloroethane	20
Indeno(1,2,3-cd)pyrene [2,3-o-Phenylene Pyrene]	20
Isophorone	10
Naphthalene	10
Nitrobenzene	10
n-Nitrosodimethylamine	50
n-Nitrosodi-n-Propylamine	20
n-Nitrosodiphenylamine	20
Phenanthrene	10
Pyrene	10
1,2,4-Trichlorobenzene	10

PESTICIDESMCL (µg/L)

Aldrin	0.05
Alpha-BHC	0.05
Beta-BHC	0.05
Gamma-BHC [lindane]	0.05
Delta-BHC	0.05
Chlordane	0.2
4,4'-DDT	0.1
4,4'-DDE [p,p-DDX]	0.1
4,4'-DDD [p,p-TDE]	0.1
Dieldrin	0.1
Alpha-Endosulfan	0.1
Beta-Endosulfan	0.1

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Endosulfan Sulfate	0.1
Endrin	0.1
Endrin Aldehyde	0.1
Heptachlor	0.05
Heptachlor Epoxide [BHC-Hexachlorocyclohexane]	0.05
PCB-1242	1.0
PCB-1254	1.0
PCB-1221	1.0
PCB-1232	1.0
PCB-1248	1.0
PCB-1260	1.0
PCB-1016	1.0
Toxaphene	5.0

The permittee may develop an effluent specific method detection limit (MDL) in accordance with Appendix B to 40 CFR Part 136 (See LAC 33:IX.2531). For any pollutant for which the permittee determines an effluent specific MDL, the permittee shall send to this Office a report containing QA/QC documentation, analytical results, and calculations necessary to demonstrate that the effluent specific MDL was correctly calculated. An effluent specific minimum quantification level (MQL) shall be determined in accordance with the following calculation:

$$MQL = 3.3 \times MDL$$

Upon written approval by this Office, the effluent specific MQL may be utilized by the permittee for all future Discharge Monitoring Report (DMR) calculations and reporting requirements.

- L. The permittee shall achieve compliance with the effluent limitations and monitoring requirements specified for discharges in accordance with the following schedule:

Effective date of the permit

M. PERMIT REOPENER CLAUSE

In accordance with LAC 33:IX.2361.C.3, this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
2. Controls any pollutant not limited in the permit; or
3. Require reassessment due to change in 303(d) status of waterbody; or

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4. Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

N. STORMWATER DISCHARGES

1. This section applies to all stormwater discharges from the facility, either through permitted outfalls or through outfalls which are not listed in the permit or as sheet flow.
2. Any runoff leaving the developed areas of the facility, other than the permitted outfall(s), exceeding 50 mg/L TOC, 15 mg/L Oil and Grease, or having a pH less than 6.0 or greater than 9.0 standard units shall be a violation of this permit. Any discharge in excess of these limitations, which is attributable to offsite contamination shall not be considered a violation of this permit. A visual inspection of the facility shall be conducted and a report made annually as described in Paragraph 4 below.
3. The permittee shall prepare, implement, and maintain a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit. The terms and conditions of the SWP3 shall be an enforceable Part of the permit. EPA document 833-R-92-002 (Storm Water Management for Industrial Activities) may be used as a guidance and may be obtained by writing to the U.S. Environmental Protection Agency, Office of Water Resources (RC-4100), 401 M Street, S.W., Washington D.C. 20460 or by calling (202) 260-7786.
4. The following conditions are applicable to all facilities and shall be included in the SWP3 for the facility.
 - a. The permittee shall conduct an annual inspection of the facility site to identify areas contributing to the storm water discharge from developed areas of the facility and evaluate whether measures to reduce pollutant loadings identified in the SWP3 are adequate and have been properly implemented in accordance with the terms of the permit or whether additional control measures are needed.
 - b. The permittee shall develop a site map which includes all areas where stormwater may contact potential pollutants or substances which can cause pollution. Any location where reportable quantities leaks or spills have previously occurred are to be documented in the SWP3. The SWP3 shall contain a description of the potential pollutant sources, including, the type and quantity of material present and what action has been taken to assure stormwater precipitation will not directly contact the substances and result in contaminated runoff.
 - c. Where experience indicates a reasonable potential for equipment failure (e.g. a tank overflow or leakage), natural condition of (e.g. precipitation), or other circumstances which result in significant amounts of pollutants reaching surface waters, the SWP3 should include a prediction of the direction, rate of flow

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and total quantity of pollutants which could be discharged from the facility as a result of each condition or circumstance.

- d. The permittee shall maintain for a period of three years a record summarizing the results of the inspection and a certification that the facility is in compliance with the SWP3, and identifying any incidents of noncompliance. The summary report should contain, at a minimum, the date and time of inspection, name of inspector(s), conditions found, and changes to be made to the SWP3.
- e. The summary report and the following certification shall be signed in accordance with LAC 33:IX.2333. The summary report is to be attached to the SWP3 and provided to the Department upon request.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signatory requirements for the certification may be found in Part III, Section D.10 of this permit.

- f. The permittee shall make available to the Department, upon request, a copy of the SWP3 and any supporting documentation.
5. The following shall be included in the SWP3, if applicable.
- a. The permittee shall utilize all reasonable methods to minimize any adverse impact on the drainage system including but not limited to:
 - i. maintaining adequate roads and driveway surfaces;
 - ii. removing debris and accumulated solids from the drainage system; and
 - iii. cleaning up immediately any spill by sweeping, absorbent pads, or other appropriate methods.
 - b. All spilled product and other spilled wastes shall be immediately cleaned up and disposed of according to all applicable regulations, Spill Prevention and Control (SPC) plans or Spill Prevention Control and Countermeasures (SPCC) plans. Use of detergents, emulsifiers, or dispersants to clean up spilled product is prohibited except where necessary to comply with State or Federal safety regulations (i.e., requirement for non-slippery

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work surface). In all such cases, initial cleanup shall be done by physical removal and chemical usage shall be minimized.

- c. All equipment, parts, dumpsters, trash bins, petroleum products, chemical solvents, detergents, or other materials exposed to stormwater shall be maintained in a manner which prevents contamination of stormwater by pollutants.
- d. All waste fuel, lubricants, coolants, solvents, or other fluids used in the repair or maintenance of vehicles or equipment shall be recycled or contained for proper disposal. Spills of these materials are to be cleaned up by dry means whenever possible.
- e. All storage tank installations (with a capacity greater than 660 gallons for an individual container, or 1,320 gallons for two or more containers in aggregate within a common storage area) shall be constructed so that a secondary means of containment is provided for the entire contents of the largest tank plus sufficient freeboard to allow for precipitation. Diked areas should be sufficiently impervious to contain spills.
- f. All diked areas surrounding storage tanks or stormwater collection basins shall be free of residual oil or other contaminants so as to prevent the accidental discharge of these materials in the event of flooding, dike failure, or improper draining of the diked area. All drains from diked areas shall be equipped with valves which shall be kept in the closed condition except during periods of supervised discharge.
- g. All check valves, tanks, drains, or other potential sources of pollutant releases shall be inspected and maintained on a regular basis to assure their proper operation and to prevent the discharge of pollutants.
- h. The permittee shall assure compliance with all applicable regulations promulgated under the Louisiana Solid Waste and Resource Recovery Law and the Hazardous Waste Management Law (L.R.S. 30:2151, etc.). Management practices required under above regulations shall be referenced in the SWP3.
- i. The permittee shall amend the SWP3 whenever there is a change in the facility or change in the operation of the facility which materially increases the potential for the ancillary activities to result in a discharge of significant amounts of pollutants.
- j. If the SWP3 proves to be ineffective in achieving the general objectives of preventing the release of significant amounts of pollutants to water of the state, then the specific objectives and requirements of the SWP3 shall be subject to modification to incorporate revised SWP3 requirements.

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6. Facility Specific SWP3 Conditions:

None

O. DISCHARGE MONITORING REPORTS

Monitoring results must be reported on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1 or an approved substitute). All monitoring reports must be retained for a period of at least three (3) years from the date of the sample measurement. The permittee shall make available to this Department, upon request, copies of all monitoring data required by this permit.

If there is a no discharge event at any of the monitored outfall(s) during the reporting period, place an "X" in the NO DISCHARGE box located in the upper right corner of the Discharge Monitoring Report.

Reporting periods shall end on the last day of the month. Monitoring results for each month shall be summarized on a Discharge Monitoring Report (DMR) Form and submitted to this Department per schedule below, postmarked no later than the 15th day of the month following each reporting period.

Permittees shall be required to submit DMR's according to the following schedule or as established in the permit:

For parameter(s) with monitoring frequency(ies) of 1/month or more frequent:

Submit DMR by the 15th day of the following month.

For parameter(s) with monitoring frequency(ies) of 1/quarter:

<u>Monitoring Period</u>	<u>DMR Due Date</u>
January 1 - March 30	April 15th
April 1 - June 30	July 15th
July 1 - September 30	October 15th
October 1 - December 30	January 15th

For parameter(s) with monitoring frequency(ies) of semi-annual:

<u>Monitoring Period</u>	<u>DMR Due Date</u>
January 1 - June 30	July 15th
July 1 - December 31	January 15th

For parameter(s) with monitoring frequency(ies) of 1/year:

<u>Monitoring Period</u>	<u>DMR Due Date</u>
January 1 - December 31	January 15th

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Duplicate copies of DMR's (one set of originals and one set of copies) signed and certified as required by LAC 33:IX.2333.B, and all other reports (one set of originals) required by this permit shall be submitted to the Permit Compliance Unit, and the appropriate DEQ regional office (one set of copies) at the following addresses:

Department of Environmental Quality
Office of Environmental Compliance
Permit Compliance Unit
Post Office Box 82215
Baton Rouge, Louisiana 70884-2215

Capital Regional Office
Office of Environmental Compliance
Surveillance Division
5222 Summa Court
Baton Rouge, Louisiana 70809

P. WHOLE EFFLUENT TOXICITY TESTING (7-DAY NOEC FRESHWATER)

1. SCOPE AND METHODOLOGY

- a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO OUTFALL(S):	001
REPORTED ON DMR AS OUTFALL:	TX10
CRITICAL DILUTION:	22%
EFFLUENT DILUTION SERIES:	29.3%, 22%, 16.5%, 12.4%, and 9.3%
COMPOSITE SAMPLE TYPE:	Defined at PART I
TEST SPECIES/METHODS:	40 CFR Part 136 (See LAC 33:IX.2531)

Ceriodaphnia dubia chronic static renewal survival and reproduction test, Method 1002.0, EPA/600/4-91/002 or the most recent update thereof. This test should be terminated when 60% of the surviving adults in the control produce three broods or at the end of eight days, whichever comes first.

Pimephales promelas (Fathead minnow) chronic static renewal 7-day larval survival and growth test, Method 1000.0, EPA/600/4-91/002, or the most recent update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.

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- b. The NOEC (No Observed Effect Concentration) is defined as the greatest effluent dilution at and below which lethality that is statistically different from the control (0% effluent) at the 95% confidence level does not occur.
- c. This permit may be reopened to require whole effluent toxicity limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.
- d. Test failure is defined as a demonstration of statistically significant sub-lethal or lethal effects to a test species at or below the effluent critical dilution.

2. PERSISTENT LETHALITY

The requirements of this section apply only when a toxicity test demonstrates significant lethal effects at or below the critical dilution. Significant lethal effects will be demonstrated if there is a statistically significant difference at the 95% confidence level between the survival of the appropriate test organism in a specified effluent dilution and the control (0% effluent).

a. Part I Testing Frequency Other Than Monthly

- i. The permittee shall conduct a total of two (2) additional tests for any species that demonstrates significant lethal effects at the critical dilution. The two additional tests shall be conducted monthly during the next two consecutive months. The permittee shall not substitute either of the two additional tests in lieu of routine toxicity testing, unless the specified testing frequency for the species demonstrating significant lethal effects is monthly. The full report shall be prepared for each test required by this section in accordance with procedures outlined in item 4 of this section and submitted with the period discharge monitoring report (DMR) to the permitting authority for review.
- ii. If one or both of the two additional tests demonstrates significant lethal effects at or below the critical dilution, the permittee shall initiate Toxicity Reduction Evaluation (TRE) requirements as specified in item 5 of this section. The permittee shall notify this Office in writing within 5 days of the failure of any retest, and the TRE initiation date will be the test completion date of the first failed retest. A TRE may also be required due to a demonstration of intermittent lethal effects at or below the critical dilution, or for failure to perform the required retests.

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- iii. If one or both of the two additional tests demonstrates significant lethal effects at or below the critical dilution, the frequency of testing for this species shall be once per quarter for the life of the permit.
- iv. The provisions of item 2.a. are suspended upon completion of the two additional tests and submittal of the TRE Action Plan.

b. Part I Testing Frequency of Monthly

The permittee shall initiate the Toxicity Reduction Evaluation (TRE) requirements as specified in item 5 of this section when any two of three consecutive monthly toxicity tests exhibit significant lethal effects at the critical dilution. A TRE may be also required due to a demonstration of persistent significant sub-lethal effects or intermittent lethal effects at or below the critical dilution, or for failure to perform the required retests.

3. REQUIRED TOXICITY TESTING CONDITIONSa. Test Acceptance

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

- i. The toxicity test control (0% effluent) must have survival equal to or greater than 80%.
- ii. The mean number of Ceriodaphnia dubia neonates produced per surviving female in the control (0% effluent) must be 15 or more.
- iii. 60% of the surviving control females must produce three broods.
- iv. The mean dry weight of surviving Fathead minnow larvae at the end of the 7 days in the control (0% effluent) must be 0.25 mg per larva or greater.
- v. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for: the young of surviving females in the Ceriodaphnia dubia reproduction test; the growth and survival endpoints of the Fathead minnow test.
- vi. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal or nonlethal effects are exhibited for:

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the young of surviving females in the Ceriodaphnia dubia reproduction test; the growth and survival endpoints of the Fathead minnow test.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.

b. Statistical Interpretation

- i. For the Ceriodaphnia dubia survival test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be Fisher's Exact Test as described in EPA/600/4-91/002, or the most recent update thereof.
- ii. For the Ceriodaphnia dubia reproduction test and the Fathead minnow larval survival and growth test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA/600/4-91/002, or the most recent update thereof.
- iii. If the conditions of Test Acceptability are met in Item 3.a above and the percent survival of the test organism is equal to or greater than 80% in the critical dilution concentration and all lower dilution concentrations, the test shall be considered to be a passing test regardless of the NOEC, and the permittee shall report a NOEC of not less than the critical dilution for the DMR reporting requirements found in Item 4 below.

c. Dilution Water

- i. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness and alkalinity to the closest downstream perennial water for;
 - (A) toxicity tests conducted on effluent discharges to receiving water classified as intermittent streams; and
 - (B) toxicity tests conducted on effluent discharges where no receiving water is available due to zero flow conditions.

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- ii. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of item 3.a), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:
 - (A) a synthetic dilution water control which fulfills the test acceptance requirements of item 3.a. was run concurrently with the receiving water control;
 - (B) the test indicating receiving water toxicity has been carried out to completion (i.e., 7 days);
 - (C) the permittee includes all test results indicating receiving water toxicity with the full report and information required by item 4. below; and
 - (D) the synthetic dilution water shall have a pH, hardness and alkalinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

d. Samples and Composites

- i. The permittee shall collect a minimum of three flow-weighted composite samples from the outfall(s) listed at item 1.a above.
- ii. The permittee shall collect second and third composite samples for use during 24-hour renewals of each dilution concentration for each test. The permittee must collect the composite samples such that the effluent samples are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on an intermittent basis.
- iii. The permittee must collect the composite samples so that the maximum holding time for any effluent sample shall not exceed 72 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first composite sample. Samples shall be chilled to 4 degrees Centigrade during collection, shipping and/or storage.
- iv. If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions and the sample holding time are waived

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during that sampling period. However, the permittee must collect an effluent composite sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in item 4 of this section.

- v. MULTIPLE OUTFALLS: If the provisions of this section are applicable to multiple outfalls, the permittee shall combine the composite effluent samples in proportion to the average flow from the outfalls listed in item 1.a above for the day the sample was collected. The permittee shall perform the toxicity test on the flow-weighted composite of the outfall samples.

4. REPORTING

- a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this section in accordance with the Report Preparation Section of EPA/600/4-91/002, or the most current publication, for every valid or invalid toxicity test initiated whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of Part III.C.3 of this permit. For any test which fails, is considered invalid or which is terminated early for any reason, the full report must be submitted for agency review. The permittee shall submit the first full report to:

Department of Environmental Quality
Office of Environmental Services
Enforcement Division
P.O. Box 82215
Baton Rouge, Louisiana 70884-2215
Attn: Permit Compliance Unit

- b. A valid test for each species must be reported on the DMR during each reporting period specified in Part I of this permit unless the permittee is performing a TRE which may increase the frequency of testing and reporting. Only ONE set of biomonitoring data for each species is to be recorded on the DMR for each reporting period. The data submitted should reflect the LOWEST Survival results for each species during the reporting period. All invalid tests, repeat tests (for invalid tests), and retests (for tests previously failed) performed during the reporting period must be attached to the DMR for this Office to review.

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If a test failure has occurred and the required retests have been performed, the test results are to be reported on the DMR as follows:

<u>Parameter Code</u>	<u>Report</u>
Retest #1 22415	0 Pass, or, 1 Fail
Retest #2 22416	0 Pass, or, 1 Fail

- c. The permittee shall submit the results of each valid toxicity test on the subsequent monthly DMR for that reporting period in accordance with Part III.D.4 of this permit, as follows below. Submit retest information clearly marked as such with the following month's DMR. Only results of valid tests are to be reported on the DMR. The permittee shall submit the Table I summary sheet with each valid test.

i. Pimephales promelas (Fathead Minnow)

- (A) If the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TLP6C.
- (B) Report the NOEC value for survival, Parameter No. TOP6C.
- (C) Report the NOEC value for growth, Parameter No. TPP6C.
- (D) If the No Observed Effect Concentration (NOEC) for growth is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP6C.
- (E) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQP6C.

ii. Ceriodaphnia dubia

- (A) If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TLP3B.
- (B) Report the NOEC value for survival, Parameter No. TOP3B.
- (C) Report the NOEC value for reproduction, Parameter No. TPP3B.
- (D) If the No Observed Effect Concentration (NOEC) for reproduction is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP3B.
- (E) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQP3B.

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The permittee shall submit the toxicity testing information contained in Table 1 of this permit with the DMR subsequent to each and every toxicity test reporting period. The DMR and the summary table should be sent to the address indicated in 4.a. The permittee is not required to send the first complete report nor summary tables to EPA.

Monitoring Frequency Reduction

- i. The permittee may apply for a testing frequency reduction upon the successful completion of the first four consecutive quarters of testing for one or both test species, with no lethal or sub-lethal effects demonstrated at or below the critical dilution. If granted, the monitoring frequency for that test species may be reduced to not less than once per year for the less sensitive species (usually the Fathead minnow) and not less than once per six months for the more sensitive test species (usually the *Ceriodaphnia dubia*). Monitoring frequency reduction shall not apply to monitoring frequencies of once per year.
- ii. CERTIFICATION - The permittee must certify in writing that no test failures have occurred and that all tests meet all test acceptability criteria in item 3.a. above. In addition, the permittee must provide a list with each test performed including test initiation date, species, NOEC's for lethal and sub-lethal effects and the maximum coefficient of variation for the controls. Upon review and acceptance of this information the agency will issue a letter of confirmation of the monitoring frequency reduction. A copy of the letter will be forwarded to the agency's Permit Compliance Unit to update the permit reporting requirements.
- iii. SURVIVAL FAILURES - If any test fails the survival endpoint at any time during the life of this permit, two monthly retests are required and the monitoring frequency for the affected test species shall be increased to once per quarter until the permit is reissued. Monthly retesting is not required if the permittee is performing a TRE.
- iv. This monitoring frequency reduction applies only until the expiration date of this permit, at which time the monitoring frequency for both test species reverts to once per quarter until the permit is reissued.

5. TOXICITY REDUCTION EVALUATION (TRE)

- a. Within ninety (90) days of confirming lethality in the retests, the permittee shall submit a Toxicity Reduction Evaluation (TRE) Action Plan and Schedule for conducting a TRE. The TRE Action Plan

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shall specify the approach and methodology to be used in performing the TRE. A Toxicity Reduction Evaluation is an investigation intended to determine those actions necessary to achieve compliance with water quality-based effluent limits by reducing an effluent's toxicity to an acceptable level. A TRE is defined as a step-wise process which combines toxicity testing and analyses of the physical and chemical characteristics of a toxic effluent to identify the constituents causing effluent toxicity and/or treatment methods which will reduce the effluent toxicity. The TRE Action Plan shall lead to the successful elimination of effluent toxicity at the critical dilution and include the following:

- i. **Specific Activities.** The plan shall detail the specific approach the permittee intends to utilize in conducting the TRE. The approach may include toxicity characterizations, identifications and confirmation activities, source evaluation, treatability studies, or alternative approaches. When the permittee conducts Toxicity Characterization Procedures the permittee shall perform multiple characterizations and follow the procedures specified in the documents "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA-600/6-91/003) and "Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I" (EPA-600/6-91/005F), or alternate procedures. When the permittee conducts Toxicity Identification Evaluations and Confirmations, the permittee shall perform multiple identifications and follow the methods specified in the documents "Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081), as appropriate.

The documents referenced above may be obtained through the National Technical Information Service (NTIS) by phone at (703) 487-4650, or by writing:

U.S. Department of Commerce
National Technical Information Service
5285 Port Royal Road
Springfield, Va. 22161

- ii. **Sampling Plan** (e.g., locations, methods, holding times, chain of custody, preservation, etc.). The effluent sample volume collected for all tests shall be adequate to perform the toxicity test, toxicity characterization, identification and confirmation procedures, and conduct chemical specific analyses when a probable toxicant has been identified;

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Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity. Where lethality was demonstrated within 48 hours of test initiation, each composite sample shall be analyzed independently. Otherwise the permittee may substitute a composite sample, comprised of equal portions of the individual composite samples, for the chemical specific analysis;

- iii. Quality Assurance Plan (e.g., QA/QC implementation, corrective actions, etc.); and
- iv. Project Organization (e.g., project staff, project manager, consulting services, etc.).
- b. The permittee shall initiate the TRE Action Plan within thirty (30) days of plan and schedule submittal. The permittee shall assume all risks for failure to achieve the required toxicity reduction.
- c. The permittee shall submit a quarterly TRE Activities Report, with the Discharge Monitoring Report in the months of January, April, July and October, containing information on toxicity reduction evaluation activities including:
 - i. any data and/or substantiating documentation which identifies the pollutant(s) and/or source(s) of effluent toxicity;
 - ii. any studies/evaluations and results on the treatability of the facility's effluent toxicity; and
 - iii. any data which identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant lethality at the critical dilution.

The TRE Activities Report shall be submitted to the following addresses:

Department of Environmental Quality
Office of Environmental Compliance
Enforcement Division
Baton Rouge, Louisiana 70884-2215
Attn: Permit Compliance Unit

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U.S. Environmental Protection Agency, Region 6
Water Enforcement Branch, 6 EN-WC
1445 Ross Avenue
Dallas, Texas 75202

- d. The permittee shall submit a Final Report on Toxicity Reduction Evaluation Activities no later than twenty-eight (28) months from confirming lethality in the retests, which provides information pertaining to the specific control mechanism selected that will, when implemented, result in reduction of effluent toxicity to no significant lethality at the critical dilution. The report will also provide a specific corrective action schedule for implementing the selected control mechanism.

A copy of the Final Report on Toxicity Reduction Evaluation Activities shall also be submitted to the above addresses.

- e. Quarterly testing during the TRB is a minimum monitoring requirement. LDEQ recommends that permittees required to perform a TRB not rely on quarterly testing alone to ensure success in the TRB, and that additional screening tests be performed to capture toxic samples for identification of toxicants. Failure to identify the specific chemical compound causing toxicity test failure will normally result in a permit limit for whole effluent toxicity limits per federal regulations at 40 CFR 122.44(d)(1)(v) and state regulations at LAC 33:IX.2361.D.1.e.

PART III STANDARD CONDITIONS FOR LPDES PERMITS

SECTION A. GENERAL CONDITIONS

1. Introduction

In accordance with the provisions of LAC 33:IX.2355, et. seq., this permit incorporates either expressly or by reference ALL conditions and requirements applicable to Louisiana Pollutant Discharge Elimination System Permits (LPDES) set forth in the Louisiana Environmental Quality Act (LEQA), as amended, as well as ALL applicable regulations.

2. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and the Louisiana Environmental Quality Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

3. Penalties for Violation of Permit Conditions

- a. LA. R. S. 30:2025 provides for civil penalties for violations of these regulations and the Louisiana Environmental Quality Act. LA. R. S. 30:2076.2 provides for criminal penalties for violation of any provisions of the LPDES or any order or any permit condition or limitation issued under or implementing any provisions of the LPDES program. (See Section E. Penalties for Violation of Permit Conditions for additional details).
- b. Any person may be assessed an administrative penalty by the State Administrative Authority under LA. R. S. 30:2025 for violating a permit condition or limitation implementing any of the requirements of the LPDES program in a permit issued under the regulations or the Louisiana Environmental Quality Act.

4. Toxic Pollutants

- a. Other effluent limitations and standards under Sections 301, 302, 303, 307, 318, and 405 of the Clean Water Act. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Clean Water Act for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, the state administrative authority shall institute proceedings under these regulations to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.
- b. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions, or standards for sewage sludge use or disposal even if the permit has not yet been modified to incorporate the requirement.

5. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The new application shall be submitted at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the state administrative authority. (The state administrative authority shall not grant permission for applications to be submitted later than the expiration date of the existing permit.) Continuation of expiring permits shall be governed by regulations promulgated at LAC 33:IX.2321 and any subsequent amendments.

6. Permit Action

This permit may be modified, revoked and reissued, or terminated for cause in accordance with LAC 33:IX.2383, 2385, 2387, 2407 and 2769. The causes may include, but are not limited to, the following:

- a. Noncompliance by the permittee with any condition of the permit;
- b. The permittee's failure in the application or during the permit issuance process to disclose fully all relevant

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facts, or the permittee's misrepresentation of any relevant facts at any time;

- c. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination;
- d. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge; or
- e. Failure to pay applicable fees under the provisions of LAC 33: IX. Chapter 13.

The filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

7. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

8. Duty to Provide Information

The permittee shall furnish to the state administrative authority, within a reasonable time, any information which the administrative authority may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the state administrative authority, upon request, copies of records required to be kept by this permit.

9. Criminal and Civil Liability

Except as provided in permit conditions on "Bypassing" and "Upsets", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of the permit, the Act, or applicable regulations, which avoids or effectively defeats the regulatory purpose of the Permit may subject the Permittee to criminal enforcement pursuant to La. R.S. 30:2025.

10. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

11. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.

12. Severability

If any provision of these rules and regulations, or the application thereof, is held to be invalid, the remaining provisions of these rules and regulations shall not be affected, so long as they can be given effect without the invalid provision. To this end, the provisions of these rules and regulations are declared to be severable.

13. Dilution

A permittee shall not achieve any effluent concentration by dilution unless specifically authorized in the permit. A permittee shall not increase the use of process water or cooling water or otherwise attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve permit limitations or water quality.

SECTION B. PROPER OPERATION AND MAINTENANCE**1. Need to Halt or Reduce not a Defense**

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

2. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

The permittee shall also take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with the permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

3. Proper Operation and Maintenance

a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

b. The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance and other functions necessary to ensure compliance with the conditions of this permit.

4. Bypass of Treatment Facilities

a. Bypass. the intentional diversion of waste streams from any portion of a treatment facility.

b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Section B.4.c. and 4.d of these standard conditions.

c. Notice

(1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Office of Environmental Services, Permits Division, if possible at least ten days before the date of the bypass.

(2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in LAC 33:IX.2355.L.6, (24-hour notice) and Section D.6.e. of these standard conditions.

d. Prohibition of bypass

(1) Bypass is prohibited, and the state administrative authority may take enforcement action against a permittee for bypass, unless:

(a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of

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equipment downtime or preventive maintenance; and,

(c) The permittee submitted notices as required by Section B.4.c of these standard conditions.

(2) The state administrative authority may approve an anticipated bypass after considering its adverse effects, if the state administrative authority determines that it will meet the three conditions listed in Section B.4.d(1) of these standard conditions.

5. Upset Conditions

a. Upset. an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Section B.5.c. are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the cause(s) of the upset;

(2) The permitted facility was at the time being properly operated; and

(3) The permittee submitted notice of the upset as required by LAC 33:IX.2355.L.6.b.ii. and Section D.6.e.(2) of these standard conditions; and

(4) The permittee complied with any remedial measures required by Section B.2 of these standard conditions.

d. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

6. Removed Substances

Solids, sewage sludges, filter backwash, or other pollutants removed in the course of treatment or wastewater control shall be disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the state.

7. Percent Removal

For publicly owned treatment works, the 30-day average percent removal for Biochemical Oxygen Demand and Total Suspended Solids shall not be less than 85 percent in accordance with LAC 33:IX.2845.A.3. and B.3.

SECTION C. MONITORING AND RECORDS**1. Inspection and Entry**

The permittee shall allow the state administrative authority, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by the law to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.

Enter upon the permittee's premises where a discharge source is or might be located or in which monitoring equipment or records required by a permit are kept for inspection or sampling purposes. Most inspections will be unannounced and should be allowed to begin immediately, but in no case shall begin more than thirty (30) minutes after the time the inspector presents his/her credentials and announces the purpose(s) of the inspection. Delay in excess of thirty (30) minutes shall constitute a violation of these regulations. However, additional time can be granted if the inspector or the Administrative Authority determines that the circumstances warrant such action.

- b. Have access to and copy, at reasonable times, any records that the department or its authorized representative determines are necessary for the enforcement of these regulations. For records maintained in either a central or private office that is open only during normal office hours and is closed at the time of inspection, the records shall be made available as soon as the office is open, but in no case later than the close of business the next working day;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Louisiana Environmental Quality Act, any substances or parameters at any location.

e. Sample Collection

- (1) When the inspector announces that samples will be collected, the permittee will be given an additional thirty (30) minutes to prepare containers in order to collect duplicates. If the permittee cannot obtain and prepare sample containers within this time, he is considered to have waived his right to collect duplicate samples and the sampling will proceed immediately. Further delay on the part of the permittee in allowing initiation of the sampling will constitute a violation of these regulations.
- (2) At the discretion of the administrative authority, sample collection shall proceed immediately (without the additional 30 minutes described in Section C.1.a. above) and the inspector shall supply the permittee with a duplicate sample.
- f. It shall be the responsibility of the permittee to ensure that a facility representative familiar with provision of its wastewater discharge permit, including any other conditions or limitations, be available either by phone or in person at the facility during all hours of operation. The absence of such personnel on-site who are familiar with the permit shall not be grounds for delaying the initiation of an inspection except in situations as described in Section C.1.b. of these standard conditions. The permittee shall be responsible for providing witnesses/escorts during inspections. Inspectors shall abide by all company safety rules and shall be equipped with standard safety equipment (hard hat, safety shoes, safety glasses) normally required by Industrial facilities.
- g. Upon written request copies of field notes, drawings, etc., taken by department personnel during an inspection shall be provided to the permittee after the final inspection report has been completed.

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2. Representative Sampling

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. All samples shall be taken at the outfall location(s) indicated in the permit. The state administrative authority shall be notified prior to any changes in the outfall location(s). Any changes in the outfall location(s) will be subject to modification, revocation and reissuance in accordance with LAC 33:IX.2383.

3. Retention of Records

Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the state administrative authority at any time.

4. Record Contents

Records of monitoring information shall include:

- a. The date, exact place, and time of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The time(s) analyses were begun;
- e. The individual(s) who performed the analyses;
- f. The analytical techniques or methods used;
- g. The results of such analyses; and
- h. The results of all quality control procedures.

5. Monitoring Procedures

- a. Monitoring results must be conducted according to test procedures approved under 40 CFR Part 136 (See LAC 33:IX.2531) or, in the case of sludge use or disposal, approved under 40 CFR part 136 (See LAC 33:IX.2531) unless otherwise specified in 40 CFR part 503, unless other test procedures have been specified in this permit. This includes procedures contained in the latest EPA approved edition of the following publications:

(1) "Standard Methods for the Examination of Water and Waste Water". This publication is available from the American Public Health Association, Publication Sales, P. O. Box 753, Waldorf, MD.20604-0573, Phone number (301) 893-1894, Fax number (301) 843-0159.

(2) "Annual Book of Standards, Vols 1101-1103, Water I, Water II, and Atmospheric Analysis". This publication is available from the American Society for Testing Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, Phone number (610) 832-9500.

(3) "Methods for Chemical Analysis of Water and Wastes, Revised, March 1983," U.S. Environmental Protection Agency, Analytical Quality Control Laboratory, Cincinnati, Ohio. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-84-128677.

- b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurements and shall maintain appropriate records of such activities.
- c. An adequate analytical quality control program, including the analyses of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory. General sampling protocol shall follow guidelines established in the "Handbook for Sampling and Sample Preservation of Water and Wastewater, 1982" U.S. Environmental

Protection Agency. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-83-124503.

General laboratory procedures including glassware cleaning, etc. can be found in the "Handbook for Analytical Quality Control in Water and Wastewater Laboratories, 1979," U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory. This publication is available from the Environmental Protection Agency, Phone number (513) 569-7562. Order by EPA publication number EPA-600/4-79-019.

8. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration and operation of acceptable flow measurement devices can be obtained from the following references:

- a. "A Guide to Methods and Standards for the Measurement of Water Flow, 1975," U.S. Department of Commerce, National Bureau of Standards. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, phone number (800) 553-6847. Order by NTIS publication number COM-75-10683.
- b. "Flow Measurement in Open Channels and Closed Conduits, Volumes 1 and 2," U.S. Department of Commerce, National Bureau of Standards. This publication is available from the National Technical Service (NTIS), Springfield, VA, 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-273 535.
- c. "NPDES Compliance Flow Measurement Manual," U.S. Environmental Protection Agency, Office of Water Enforcement. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-82-131178.

7. Prohibition for Tampering: Penalties

a. LA R.S. 30:2025 provides for punishment of any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit.

b. LA R.S. 30:2078.2 provides for penalties for any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non compliance.

8. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 (See LAC 33:IX.2531) or, in the case of sludge use and disposal, approved under 40 CFR part 136 (See LAC 33:IX.2531) unless otherwise specified in 40 CFR part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the state administrative authority.

9. Averaging of Measurements

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the state administrative authority in the permit.

10. Laboratory Accreditation

- a. LAC 33:I.Subpart 3, Chapters 45-59 provide requirements for an accreditation program specifically applicable to commercial laboratories, wherever located, that provide chemical analyses, analytical results, or other test data to the department, by contract or by agreement, and the data is:

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- (1) Submitted on behalf of any facility, as defined in R.S.30:2004;
 - (2) Required as part of any permit application;
 - (3) Required by order of the department;
 - (4) Required to be included on any monitoring reports submitted to the department;
 - (5) Required to be submitted by contract or
 - (6) Otherwise required by department regulations.
- b. The department laboratory accreditation program is designed to ensure the accuracy, precision, and reliability of the data generated, as well as the use of department-approved methodologies in generation of that data. Laboratory data generated by commercial environmental laboratories that are not accredited under these regulations will not be accepted by the department. Retesting of analysis will be required by an accredited commercial laboratory.

Where retesting of effluent is not possible (i.e. data reported on DMRs for prior month's sampling), the data generated will be considered invalid and in violation of the LPDES permit.

- c. Regulations on the Environmental Laboratory Accreditation Program and a list of labs that have applied for accreditation, are available on the department website located at:

<http://www.deq.state.la.us/laboratory/index.htm>.

Questions concerning the program may be directed to (225) 765-0582.

SECTION D. REPORTING REQUIREMENTS

1. Facility Changes

The permittee shall give notice to the state administrative authority as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
- b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under LAC 33:IX.2357.A.1.
- c. **For Municipal Permits.** Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to Section 301, or 306 of the CWA if it were directly discharging those pollutants; and any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit. In no case are any new connections, increased flows, or significant changes in influent quality permitted that will cause violation of the effluent limitations specified herein.

2. Anticipated Noncompliance

The permittee shall give advance notice to the state administrative authority of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers

This permit is not transferable to any person except after notice to the state administrative authority. The state administrative authority may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act or the Louisiana Environmental Quality Act. (See LAC 33:IX.2381; in some cases, modification or revocation and reissuance is mandatory.)

- a. Transfers by modification. Except as provided in LAC 33: IX.2381.B, a permit may be transferred by the

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permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under LAC 33:IX.2383.B.2), or a minor modification made (under LAC 33:IX.2385) to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act and the Louisiana Environmental Quality Act.

- b. **Automatic transfers.** As an alternative to transfers under LAC 33:IX.2381.A., any LPDES permit may be automatically transferred to a new permittee if:

- (1) The current permittee notifies the administrative authority at least 30 days in advance of the proposed transfer date in Section D.3.b.(2) below;
- (2) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
- (3) The state administrative authority does not notify the existing permittee and the proposed new permittee of his or her intent to modify or revoke and reissue the permit. A modification under this subsection may also be a minor modification under LAC 33:IX.2385. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Section D.3.b.(2) of these standard conditions.

4. **Monitoring Reports**

Monitoring results shall be reported at the intervals and in the form specified in Part II.

5. **Compliance Schedules**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

6. **Requirements for Notification**

a. **Emergency Notification**

As required by LAC 33:I.3915, in the event of an unauthorized discharge that does cause an emergency condition, the discharger shall notify the hotline (DPS 24-hour Louisiana Emergency Hazardous Materials Hotline) by telephone at (225) 925-6595 (collect calls accepted 24 hours a day) immediately (a reasonable period of time after taking prompt measures to determine the nature, quantity, and potential off-site impact of a release, considering the exigency of the circumstances), but in no case later than one hour after learning of the discharge. (An emergency condition is any condition which could reasonably be expected to endanger the health and safety of the public, cause significant adverse impact to the land, water, or air environment, or cause severe damage to property.) Notification required by this section will be made regardless of the amount of discharge. Verbal Notification Procedures are listed in Section D.6.c. of these standard conditions.

A written report shall be provided within seven calendar days after the telephone notification. The report shall contain the information listed in Section D.6.d. of these standard conditions and any additional information in LAC 33:I.3925.B.

b. **Prompt Notification**

As required by LAC 33:I.3917, in the event of an unauthorized discharge which exceeds reportable quantity specified in LAC 33:I.Subchapter E, but does not cause an emergency condition, the discharger shall notify the Office of Environmental Compliance by e-mail utilizing the Incident Report Form and procedures found at www.deq.state.la.us/surveillance or by telephone within 24 hours after learning of the discharge. Otherwise, verbal notification should be made to the Office of Environmental Compliance at (225) 763-3908 during office hours or (225) 342-1234 after hours, weekends, and holidays.

- c. **Information for Verbal Notifications.** The following guidelines will be utilized as appropriate, based on the conditions and circumstances surrounding any unauthorized discharge, to provide relevant information

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regarding the nature of the discharge:

- (1) name of person making the notification and telephone number where any return calls from response agencies can be placed;
 - (2) name and location of facility or site where the unauthorized discharge is imminent or has occurred using common landmarks. In the event of an incident involving transport, include the name and address of transporter and generator;
 - (3) date and time the incident began and ended, or estimated time of continuation if discharge is continuing;
 - (4) extent of any injuries and identification of any known personnel hazards which response agencies may face;
 - (5) common or scientific chemical name, U.S. Department of Transportation hazard classification, and best estimate of amounts of any and all discharged pollutants;
 - (6) brief description of the incident sufficient to allow response agencies to formulate level and extent of response activity.
- d. Written Notification Procedures. Written reports for any unauthorized discharge that requires verbal notification under Section D.8.a. or 8.b., or that requires written notification under LAC 33:1.3919, will be submitted by the discharger to the department in accordance with this section within seven calendar days after the telephone notification. Written notification reports will include, but are not limited to, the following information:
- (1) name of person, company, or other party who is filing the written report;
 - (2) time and date of verbal notification, name of person making the notification, and identification of the site or facility, vessel, transport vehicle, or storage area from which the unauthorized discharge occurred;
 - (3) date(s), time(s), and duration of the unauthorized discharge and, if not corrected, the anticipated time it is expected to continue;
 - (4) details of the circumstances and events leading to any emergency condition, including incidents of loss of sources of radiation;
 - (5) common or scientific chemical name, the CAS number, U.S. Department of Transportation hazard classification, and best estimate of amounts of any and all discharge pollutants, including methodology for calculations and estimates;
 - (6) statement of actual or probable fate or disposition of the pollutant or source of radiation;
 - (7) remedial actions taken, or to be taken, to stop unauthorized discharges or to recover pollutants or sources of radiation.
- Please see LAC 33:1.3925.B for additional written notification procedures.
- e. Twenty-four Hour Reporting. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and; steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The following shall be included as information which must be reported within 24 hours:

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- (1) Any unanticipated bypass which exceeds any effluent limitation in the permit (see LAC 33:IX.2355.M.3.b.);
- (2) Any upset which exceeds any effluent limitation in the permit;
- (3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the administrative authority in Part II of the permit to be reported within 24 hours (LAC 33:IX.2361.G.).

7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Section D.4., 5., and 6., at the time monitoring reports are submitted. The reports shall contain the information listed in Section D.8.e.

8. Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the state administrative authority, it shall promptly submit such facts or information.

9. Discharges of Toxic Substances

In addition to the reporting requirements under Section D.1-8, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Office of Environmental Services, Permits Division as soon as they know or have reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant:
 - i. listed at Chapter 23, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4 -dinitro-phenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with LAC 33:IX.2331.G.7; or
 - (4) The level established by the state administrative authority in accordance with LAC 33:IX.2361.F.; or
 - ii. which exceeds the reportable quantity levels for pollutants at LAC 33:I. Subchapter E.
- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant:
 - i. listed at Chapter 23, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) Five hundred micrograms per liter (500 µg/L);
 - (2) One milligram per liter (1 mg/L) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with LAC 33:IX.2331.G.7; or
 - (4) The level established by the state administrative authority in accordance with LAC 33:IX.2361.F.; or
 - ii. which exceeds the reportable quantity levels for pollutants at LAC 33:I. Subchapter E.

10. Signatory Requirements

All applications, reports, or information submitted to the state administrative authority shall be signed and certified.

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a. All permit applications shall be signed as follows:

- (1) For a corporation - by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - (a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or,
 - (b) The manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

NOTE: DEQ does not require specific assignments or delegations of authority to responsible corporate officers identified in Section D.10.a.(1)(a). The agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the state administrative authority to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under Section D.10.a.(1)(b), rather than to specific individuals.

- (2) For a partnership or sole proprietorship - by a general partner or the proprietor, respectively; or
 - (3) For a municipality, state, federal, or other public agency - by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes:
 - (a) The chief executive officer of the agency, or
 - (b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).
- b. All reports required by permits and other information requested by the state administrative authority shall be signed by a person described in Section D.10.a., or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- (1) The authorization is made in writing by a person described in Section D.10.a. of these standard conditions;
 - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (a duly authorized representative may thus be either a named individual or an individual occupying a named position; and,
 - (3) The written authorization is submitted to the state administrative authority.
- c. Changes to authorization. If an authorization under Section D.10.b. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Section D.10.b. must be submitted to the state administrative authority prior to or together with any reports, information, or applications to be signed by an authorized representative.
- d. Certification. Any person signing a document under Section D.10. a. or b. above, shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system,

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or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

11. Availability of Reports

All recorded information (completed permit application forms, fact sheets, draft permits, or any public document) not classified as confidential information under R.S. 30:2030(A) and 30:2074(D) and designated as such in accordance with these regulations (LAC 33:IX.2323 and LAC 33:IX.2763) shall be made available to the public for inspection and copying during normal working hours in accordance with the Public Records Act, R.S. 44:1 et seq.

Claims of confidentiality for the following will be denied:

- a. The name and address of any permit applicant or permittee;
- b. Permit applications, permits, and effluent data.
- c. Information required by LPDES application forms provided by the state administrative authority under LAC 33:IX.2331 may not be claimed confidential. This includes information submitted on the forms themselves and any attachments used to supply information required by the forms.

SECTION E. PENALTIES FOR VIOLATIONS OF PERMIT CONDITION

1. Criminal

a. Negligent Violations

The Louisiana Revised Statutes LA. R. S. 30:2076.2 provides that any person who negligently violates any provision of the LPDES, or any order issued by the secretary under the LPDES, or any permit condition or limitation implementing any such provision in a permit issued under the LPDES by the secretary, or any requirement imposed in a pretreatment program approved under the LPDES is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than \$50,000 per day of violation, or imprisonment of not more than two years, or both.

b. Knowing Violations

The Louisiana Revised Statutes LA. R. S. 30:2076.2 provides that any person who knowingly violates any provision of the LPDES, or any permit condition or limitation implementing any such provisions in a permit issued under the LPDES, or any requirement imposed in a pretreatment program approved under the LPDES is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than \$100,000 per day of violation, or imprisonment of not more than six years, or both.

c. Knowing Endangerment

The Louisiana Revised Statutes LA. R. S. 30:2076.2 provides that any person who knowingly violates any provision of the LPDES, or any order issued by the secretary under the LPDES, or any permit condition or limitation implementing any such provisions in a permit issued under the LPDES by the secretary, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000, or by imprisonment for not more than 15 years, or both. A person which is an organization shall, upon conviction of violating this Paragraph, be subject to a fine of not more than one million dollars. If a conviction of a person is for a violation committed after a first conviction of such person under this Paragraph, the maximum punishment shall be doubled with respect to both fine and imprisonment.

d. False Statements

The Louisiana Revised Statutes LA. R. S. 30:2076.2 provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document

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filed or required to be maintained under the LPDES or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the LPDES, shall, upon conviction, be subject to a fine of not more than \$10,000, or imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this Subsection, he shall be subject to a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

2. Civil Penalties

The Louisiana Revised Statutes LA. R. S. 30:2025 provides that any person found to be in violation of any requirement of this Subtitle may be liable for a civil penalty, to be assessed by the secretary, an assistant secretary, or the court, of not more than the cost to the state of any response action made necessary by such violation which is not voluntarily paid by the violator, and a penalty of not more than \$27,500 for each day of violation. However, when any such violation is done intentionally, willfully, or knowingly, or results in a discharge or disposal which causes irreparable or severe damage to the environment or if the substance discharge is one which endangers human life or health, such person may be liable for an additional penalty of not more than one million dollars.

(PLEASE NOTE: These penalties are listed in their entirety in Subtitle II of Title 30 of the Louisiana Revised Statutes.)

SECTION F. DEFINITIONS

All definitions contained in Section 502 of the Clean Water Act shall apply to this permit and are incorporated herein by reference. Unless otherwise specified in this permit, additional definitions of words or phrases used in this permit are as follows:

1. "Clean Water Act" means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or the Federal Water Pollution Control Act Amendments of 1972) Pub.L.92-500, as amended by Pub.L. 95-217, Pub.L. 95-578, Pub.L. 98-483 and Pub.L. 97-117, 33 U.S.C. 1251 et seq.).
2. "Accreditation" means the formal recognition by the department of a laboratory's competence wherein specific tests or types of tests can be accurately and successfully performed in compliance with all minimum requirements set forth in the regulations regarding laboratory accreditation.
3. "Administrator" means the Administrator of the U.S. Environmental Protection Agency, or an authorized representative.
4. "Applicable effluent standards and limitations" means all state and Federal effluent standards and limitations to which a discharge is subject under the Clean Water Act, including, but not limited to, effluent limitations, standards or performance, toxic effluent standards and prohibitions, and pretreatment standards.
5. "Applicable water quality standards" means all water quality standards to which a discharge is subject under the Clean Water Act.
6. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
7. "Commercial Laboratory" means any laboratory that performs analyses or tests for third parties for a fee or other compensation, except those commercial laboratories accredited by the Department of Health and Hospitals in accordance with R.S.49:1001 et seq.
8. "Daily Discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day. Daily discharge determination of concentration

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made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily discharge determination of concentration shall be arithmetic average (weighted by flow value) of all samples collected during that sampling day.

9. **"Daily Maximum"** discharge limitation means the highest allowable "daily discharge" during the calendar month.
10. **"Director"** means the U.S. Environmental Protection Agency Regional Administrator or an authorized representative.
11. **"Environmental Protection Agency"** means the U.S. Environmental Protection Agency.
12. **"Grab sample"** means an individual sample collected in less than 15 minutes.
13. **"Industrial user"** means a nondomestic discharger, as identified in 40 CFR 403, introducing pollutants to a publicly owned treatment works.
14. **"LEQA"** means the Louisiana Environmental Quality Act.
15. **"Louisiana Pollutant Discharge Elimination System (LPDES)"** means those portions of the Louisiana Environmental Quality Act and the Louisiana Water Control Law and all regulations promulgated under their authority which are deemed equivalent to the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act in accordance with Section 402 of the Clean Water Act and all applicable federal regulations.
16. **"Monthly Average"** (also known as Daily Average), other than for fecal coliform bacteria, discharge limitations means the highest allowable average of "daily discharge(s)" over a calendar month, calculated as the sum of all "daily discharge(s)" measured during a calendar month divided by the number of "daily discharge(s)" measured during that month. When the permit establishes monthly average concentration effluent limitations or conditions, the monthly average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar month where C = daily discharge concentration, F = daily flow and n = number of daily samples; monthly average discharge =

$$\frac{C_1F_1 + C_2F_2 + \dots + C_nF_n}{F_1 + F_2 + \dots + F_n}$$

The monthly average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar month.

17. **"National Pollutant Discharge Elimination System"** means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the Clean Water Act.
18. **"Severe property damage"** means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
19. **"Sewage sludge"** means the solids, residues, and precipitates separated from or created in sewage by the unit processes of a publicly owned treatment works. Sewage as used in this definition means any wastes, including wastes from humans, households, commercial establishments, industries, and storm water runoff, that are discharged to or otherwise enter a publicly owned treatment works.
20. **"Treatment works"** means any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage and industrial wastes of a liquid nature to implement Section 201 of the Clean Water Act, or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including

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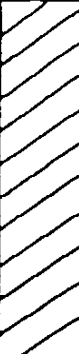
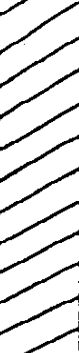

intercepting sewers, sewage collection systems, pumping, power and other equipment, and their appurtenances, extension, improvement, remodeling, additions, and alterations thereof.

21. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
22. For fecal coliform bacteria, a sample consists of one effluent grab portion collected during a 24-hour period at peak loads.
23. The term "MGD" shall mean million gallons per day.
24. The term "mg/L" shall mean milligrams per liter or parts per million (ppm).
25. The term "ug/L" shall mean micrograms per liter or parts per billion (ppb).
26. "Weekly average", other than for fecal coliform bacteria, is the highest allowable arithmetic mean of the daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week. The weekly average for fecal coliform bacteria is the geometric mean of the daily discharges over a calendar week.
27. "12-hour composite sample" consists of 12 effluent portions collected no closer together than one hour and composited according to flow. The daily sampling intervals shall include the highest flow periods.
28. "6-hour composite sample" consists of six effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) and composited according to flow.
29. "3-hour composite sample" consists of three effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) and composited according to flow.
30. Sanitary Wastewater Term(s):
 - a. "24-hour composite sample" consists of a minimum of 12 effluent portions collected at equal time intervals over the 24-hour period and combined proportional to flow or a sample collected at frequent intervals proportional to flow over the 24-hour period.

APPENDIX I

SOIL BORING LOGS

VISUAL CLASSIFICATION OF SOILS

DEPTH FEET	SAMPLE TYPE & NO.	BLOW ON SAMPLER PER FOOT	RECOVERY INCHES	USCS SYMBOL	SOIL PROFILE	DESCRIPTION		
60	N/A	N/A	N/A	SC		Gray Fine Grain Silty Sandy Clay		
65	SP16	N/A	16	SC		Tan Fine Grain Silty Sandy Clay		
70	SP17	N/A	20	CL			Tan Silty Clay	
75	SP18	N/A	21	CL			Tan and Gray Clay	
80	SP19	N/A	21	CL				Tan Clay
85	SP20	N/A	19	CL				
90	SP21	N/A	20	CL				

NOTES: SP - Split Spoon ST - Shelby Tube
Hole Terminated at 90 Feet

CONSISTENCY OF COHESIVE SOILS

CONSISTENCY	UNCONFINED COMPRESSIVE STRENGTH(TONS PER SQUARE FOOT)
VERY SOFT	LESS THAN 0.25
SOFT	0.25 TO 0.50
MEDIUM STIFF	0.50 TO 1.0
STIFF	1.0 TO 2.0
VERY STIFF	2.0 TO 4.0
HARD	MORE THAN 4.0

DENSITY OF GRANULAR SOILS

DENSITY	STANDARD PENETRATION RESISTANCE ⁽¹⁾
VERY LOOSE	0 - 4
LOOSE	5 - 10
MEDIUM DENSE	11 - 30
DENSE	31 - 50
VERY DENSE	OVER 50

(1) STANDARD PENETRATION RESISTANCE IS THE NUMBER OF BLOWS REQUIRED TO DRIVE A 2-INCH O.D. SPLIT BARREL SAMPLER 12 INCHES USING A 140-POUND HAMMER FALLING FREELY THROUGH 30 INCHES. THE SAMPLER IS DRIVEN 15 INCHES AND THE NUMBER OF BLOWS RECORDED FOR EACH 6-INCH INTERVAL. THE SUMMATION OF THE FINAL TWO INTERVALS IS THE STANDARD PENETRATION RESISTANCE.

U S C S CLASSIFICATION FOR SOILS


















COARSE-GRAINED SOILS

CLEAN GRAVELS (LITTLE OR NO FINES)	GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
	GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)	GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
	GC	CLAYEY GRAVELS GRAVEL-SAND-CLAY MIXTURES
CLEAN SANDS (LITTLE OR NO FINES)	SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
	SP	POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)	SM	SILTY SANDS, SAND-SILT MIXTURES
	SC	CLAYEY SANDS, SAND-CLAY MIXTURES

FINE-GRAINED/HIGHLY ORGANIC SOILS

SILTS AND CLAYS LIQUID LIMIT (LESS THAN 50)	ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
	CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
	OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
SILTS AND CLAYS LIQUID LIMIT (GREATER THAN 50)	MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SILTS
	CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
	OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS	PT	PEAT, MUDS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

LEGEND

GW		WELL GRADED GRAVELS OR GRAVEL-SAND MIXTURES, LITTLE OR NO FINES.
GP		POORLY GRADED GRAVELS OR GRAVEL-SAND MIXTURES, LITTLE OR NO FINES.
GM		SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES.
GC		CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES.
SW		WELL GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES.
SP		POORLY GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES.
SM		SILTY SANDS, SAND-SILT MIXTURES.
SC		CLAYEY SANDS, SAND-CLAY MIXTURES.
SC-H		SAME AS ABOVE WITH HIGH LIQUID LIMIT.
ML		INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY.
OH		ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS.
OL		ORGANIC SILTS AND ORGANIC SILT-CLAYS OF LOW PLASTICITY.
MH		INORGANIC SILTS MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS.
CH		INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS.
CL		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS.
PT		PEAT AND OTHER HIGHLY ORGANIC SOILS.
		SANDSTONE
		NO SAMPLE OR RECOVERY.

ENVIRONMENTAL LABORATORIES, Inc.

P.O. Drawer 2309 / Gulfport, Mississippi 39505 / (601) 863-3036

TYPE OF TEST: Grain Size Distribution

DATE: January 8, 1986

CLIENT: C-K Associates, Inc.

JOB NO: 50-313

PROJECT: Exxon Plastics - Baton Rouge, Louisiana

JOB REQUEST NO: 5260

TYPE MATERIAL TESTED: Listed Below

SAMPLE NO: 6431


LOCATION: Listed Below

SAMPLE IDENTIFICATION	SIEVE SIZE	PERCENT PASSING	ATTERBERG LIMITS
B - 1, SP 7	No. 10	99.7	L.L. 72
18' - 20'	No. 40	98.2	P.L. 25
	No. 60	98.7	P.I. 47
	No. 200	98.4	

CLASSIFICATION: CH

TYPE MATERIAL TESTED: Tan And Gray Clay

Copies to:


ALLEN D. RANDALL, LAB DIRECTOR
PHYSICAL DIVISION

DEPTH FEET	SAMPLE TYPE & NO.	BLOW ON SAMPLER PER FOOT	RECOVERY INCHES	USCS SYMBOL	SOIL PROFILE	DESCRIPTION
0	SP1	N/A	14	SC		Light Brown Silty Clayey Sand With a Trace of Shell
	SP2	N/A	20	CL		Dark Gray Silty Clay
5	SP3	N/A	20	CL		
	SP4	N/A	16	CL		
10	SP5	N/A	10	CL CH		Light Gray Clay
15						
20						
25	SP6	N/A	16	CL		Tan Silty Clay
	ST1	N/A	24	CL		Gray and Tan Silty Clay
30						


NOTES: SP - Split Spoon ST - Shelby Tube
Hole Terminated at 32 Feet

ENVIRONMENTAL LABORATORIES, Inc.

P.O. Drawer 2309 / Gulfport, Mississippi 39505 / (601) 863-3036

VISUAL CLASSIFICATION OF SOILS

JOB NUMBER: 50-313	PROJECT NAME: Exxon Plastics - Baton Rouge, Louisiana	
BORING NUMBER: MW-8	COORDINATES: Site Drawing	DATE: January 8, 1986
ELEVATION: Existing	GWL: Depth 3.56'	DATE STARTED: 1/4/86
ENGINEER/GEOLOGIST: CAM	DATE COMPLETED: 1/4/86	
DRILLING METHODS: Hollow Stem Auger	PAGE 2 OF 2	

DEPTH FEET	SAMPLE TYPE & NO.	BLOW ON SAMPLER PER FOOT	RECOVERY INCHES	USCS SYMBOL	SOIL PROFILE	DESCRIPTION
30	ST2	N/A	24	CL		Gray Silty Clay
35						
40						
45						
50						
55						
60						

NOTES: SP - Split Spoon ST - Shelby Tube
Hole Terminated at 32 Feet

ENVIRONMENTAL LABORATORIES, Inc.

P.O. Drawer 2309 / Gulfport, Mississippi 39505 / (601) 863-3036

PROJECT: Exxon Plastics-Baton Rouge, Louisiana

CLIENT: C-K Associates, Inc.

JOB NO.: 50-313

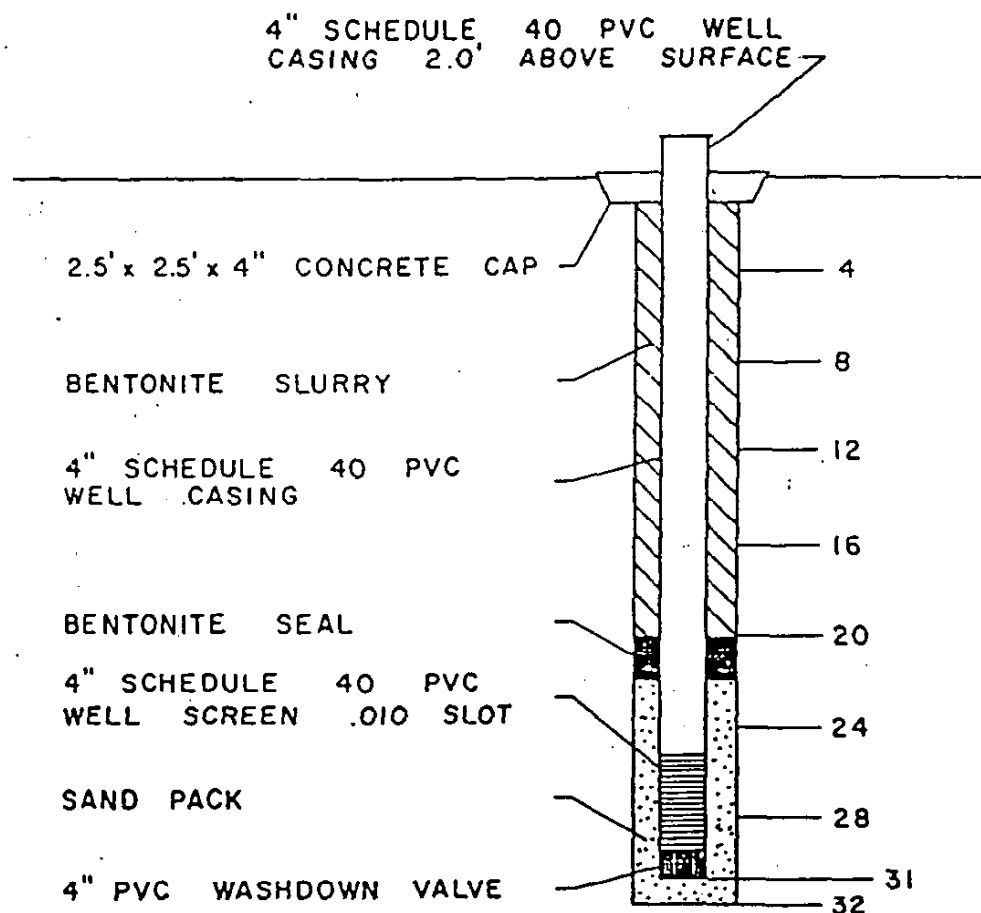
GROUNDWATER LEVEL: 3.56'

JOB REQUEST NO.: 5260

BORING NO.: MW-B

INSTALLATION DATE: January 4, 1986

SAMPLE NO.: 6431



Appendix G

Permeability of Soil Samples

<u>Boring No.</u>	<u>Soil Type</u>	<u>Depth (ft.)</u>	<u>Permeability cm/sec</u>
A	CL	30-32	3.486×10^{-9}
B	CL	27-29	4.437×10^{-9}
B	CL	30-32	3.183×10^{-8}

PROJECT: Exxon Plastics - Baton Rouge, Louisiana

CLIENT: C-K Associates, Inc.

JOB NO.: 50-313

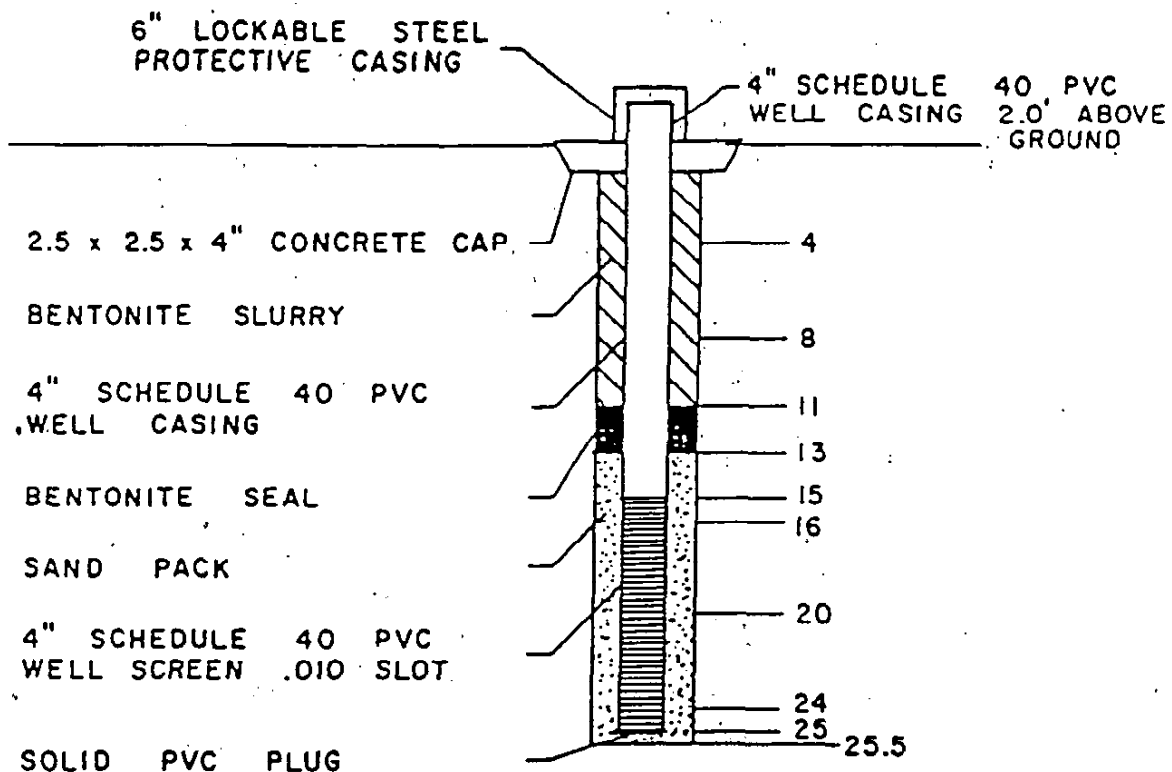
GROUNDWATER LEVEL: 6.67'

JOB REQUEST NO.: 5413

BORING NO.: MW-10

INSTALLATION DATE: March 11, 1986

SAMPLE: 6623



ENVIRONMENTAL LABORATORIES, Inc.

P.O. Drawer 2309 / Gulfport, Mississippi 39505 / (601) 863-3036

VISUAL CLASSIFICATION OF SOILS

JOB NUMBER: 50-313	PROJECT NAME: Exxon Plastics - Baton Rouge, Louisiana	
BORING NUMBER: MW - 10	COORDINATES: Site Drawing	DATE: March 26, 1986
ELEVATION: Existing	GWL: Depth 6.67'	DATE STARTED: 3/10/86
ENGINEER/GEOLOGIST: CAM		DATE COMPLETED: 3/10/86
DRILLING METHODS: Hollow Stem Auger		PAGE 1 OF 1

DEPTH FEET	SAMPLE TYPE & NO.	BLOW ON SAMPLER PER FOOT	RECOVERY	INCHES	USCS SYMBOL	SOIL PROFILE	DESCRIPTION
0	A1	N/A	12	CL			Light Tan Silty Clay
	SP1	N/A	29	CH			Gray Silty Clay With Traces Of Clay Shells
5	SP2	N/A	30	CH			Dark Gray Clay
	SP3	N/A	22	CH			Grayish Blue Clay
10	SP4	N/A	32	CH			Blue Clay
	SP5	N/A	24	CL			Gray Silty Clay
15	SP6	N/A	26	CL			
	SP7	N/A	21	CL			
20	SP8	N/A	32	CL			Gray Sandy Clay
	SP9	N/A	21	CH			Grayish Blue Clay
25							
30							

NOTES: SP - Split Spoon A - Auger • Top And Bottom Of Screen
 Hole Terminated at 25.5 Feet — Water Table

WATER RESOURCES SECTION
WATER WELL REGISTRATION FORM (DOTD-QW-15)

PLEASE PRINT IN INK OR TYPE WHEN COMPLETING THIS FORM

1. USE OF WELL (Check Appropriate Box)
☐ DOMESTIC ☐ RIG SUPPLY ☒ MONITORING ☐ ABANDONED PILOT HOLE ☐ OTHER (please specify)
☐ HEAT PUMP HOLE ☐ HEAT PUMP SUPPLY
2. WELL OWNER EXLON PLASTICS PHONE (504) 291-1218
3. ADDRESS 11675 SCOTLAND AVE - BATON ROUGE, LOUISIANA
4. OWNER'S WELL NUMBER OR NAME (if any) MW-10
5. DATE COMPLETED MARCH 11, 1986 DEPTH OF HOLE 26.5 FT. DEPTH OF WELL 25.0 FT.
6. STATIC WATER LEVEL 6.07 FT. BELOW GROUND SURFACE MEASURED ON MARCH 24, 1986
(Date)
7. CASING 4 IN. ☐ STEEL OR ☒ PVC SCH. 40 LENGTH 15 FT.
8. SCREEN 4 IN. ☐ STEEL OR ☒ PVC SCH. 40 SLOT SIZE 0.010" LENGTH 10 FT.
9. CEMENTED FROM 11 FT. TO GROUND SURFACE, USING ☒ PUMP-DOWN OR ☐ GRAVITY METHOD
10. LOCATION OF WELL: PARISH EAST BATON ROUGE WELL IS NEAR BATON ROUGE, LA.
APPROXIMATELY 1/4 MILES FROM PLEASE SEE ATTACHED SITE DRAWINGS
(Crossroads, Railroad, Any Landmark, etc.)
PLEASE SEE ATTACHED SITE DRAWINGS
(Please draw sketch on back of Original)

11. REMARKS

12. DRILLER'S LOG (Description and color of cuttings, such as shale, sand, etc., in feet)

FROM	TO	DESCRIPTION	FROM	TO	DESCRIPTION
2'	2'	LIGHT TAN SILTY CLAY	20'	23'	GRAY SANDY CLAY
2'	5'	GRAY SILTY CLAY WITH FRAGMENTS OF CLAMSHELLS	23'	25.5'	GRAYISH BLUE CLAY
5'	8'	DARK GRAY CLAY			
8'	10'	GRAYISH BLUE CLAY			
10'	13'	BLUE CLAY			
13'	20'	GRAY SILTY CLAY			

13. FOR HEAT-PUMP HOLES ONLY: AVG. DEPTH _____ FT., NUMBER OF HOLES _____

TUBING MATERIAL ☐ PVC, ☐ PS, ☐ PS, ☐ OTHER _____

14. ABANDONMENT INFORMATION: DOES THE NEW WELL REPLACE AN EXISTING WELL? YES ☐ NO ☒

NAME OF WATER WELL CONTRACTOR
EXLON PLASTICS, LA. LABORATORIES, INC.

LICENSE NUMBER MWC-287

Authorized Signature [Signature] Date 3-23-86

MAIL ORIGINAL TO:

LOUISIANA DEPARTMENT OF
TRANSPORTATION AND DEVELOPMENT
ATTN: CHIEF - WATER RESOURCES SECTION
P.O. BOX 94243
BATON ROUGE, LA 70804-9248
(504) 378-1434

FOR OFFICE USE ONLY

STATE 22 PARISH 3 LOCAL WELL NO. 11

IDENTIFICATION NUMBER
303304011105016

OWNER'S NAME
EXLON PLASTICS

WELL DEPTH 25 FL. Well 43 Use of Well 46

Date 10/3/86 No. 48 Yr. 52

Completed 48

OWNER'S NO. 11010 Geologic Unit 37

CONTRACTOR'S NAME EXLON PLASTICS

SECTION 059 TOWNSHIP 065 RANGE 012

HOLE DEPTH 25 ELEV. 43 QUAD NO. 46

Inspected By _____
Date _____
Remarks _____

PROJECT: Exxon Plastics - Baton Rouge, Louisiana

CLIENT: C-K Associates, Inc.

JOB NO.: 50-313

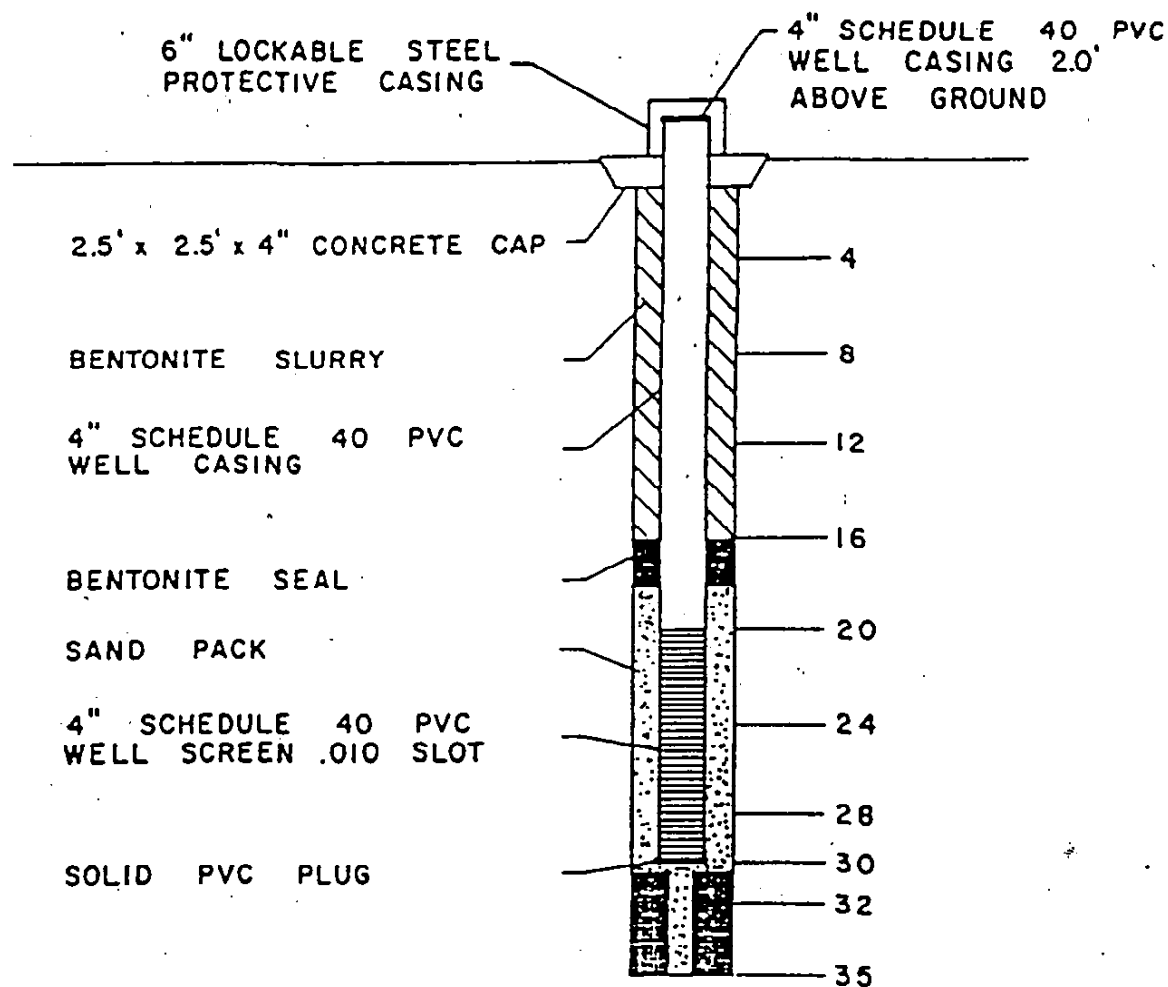
GROUNDWATER LEVEL: 4.29'

JOB REQUEST NO.: 5413

BORING NO.: MW-11

INSTALLATION DATE: March 11, 1986

SAMPLE NO.: 6623



ENVIRONMENTAL LABORATORIES, Inc.

P.O. Drawer 2309 / Gulfport, Mississippi 39505 / (601) 863-3036

VISUAL CLASSIFICATION OF SOILS

JOB NUMBER: 50-313	PROJECT NAME: Exxon Plastics - Baton Rouge, Louisiana	
BORING NUMBER: MW - 11	COORDINATES: Site Drawing	DATE: March 26, 1986
ELEVATION: Existing	GWL: Depth 4.29'	DATE STARTED: 3/11/86
ENGINEER/GEOLOGIST: CAM	DATE COMPLETED: 3/11/86	
DRILLING METHODS: Hollow Stem Auger	PAGE 1	OF 2

DEPTH FEET	SAMPLE TYPE & NO.	BLOWN SAMPLER PER FOOT	RECOVERY INCHES	USCS SYMBOL	SOIL PROFILE	DESCRIPTION
0	A1	N/A	12	CL		Light Brown Silty Clay
	SP1	N/A	30	CH		Tan Clay
5	SP2	N/A	21	CH		Light Brown Clay
	SP3	N/A	20	CH		Brown Clay
10	SP4	N/A	33	CH		Light Blue Clay
	SP5	N/A	23	CH		Gray Clay
15	SP6	N/A	32	CH		
	SP7	N/A	23	CH		
20	SP8	N/A	32	CH		Tan Silty Clay
	SP9	N/A	20	CL		Light Blue Clay
25	SP10	N/A	34	CL		Tan Clay
	SP11	N/A	21	CH		Blue Clay
30						

NOTES: SP - Split Spoon A - Auger • Top And Bottom Of Screen
 Hole Terminated at 35 Feet — Water Table

ENVIRONMENTAL LABORATORIES, Inc.

WATER RESOURCES SECTION
WATER WELL REGISTRAR
JRT FORM (DOTD-QW-15)

PLEASE PRINT IN INK OR TYPE WHEN COMPLETING THIS FORM

1. USE OF WELL (Check Appropriate Box)
☐ DOMESTIC ☐ RIG SUPPLY ☒ MONITORING ☐ ABANDONED PILOT HOLE ☐ OTHER (Please specify)
☐ HEAT PUMP HOLE ☐ HEAT PUMP SUPPLY
2. WELL OWNER EVANON PLASTICS PHONE (504) 291-9138
3. ADDRESS 11673 SCOTLAND AVE. BATON ROUGE, LOUISIANA
4. OWNER'S WELL NUMBER OR NAME (if any) MMW-11
5. DATE COMPLETED MARCH 11, 1986 DEPTH OF HOLES 610 FT. DEPTH OF WELL 30.0 FT.
6. STATIC WATER LEVEL 4.29 FT. BELOW GROUND SURFACE MEASURED ON MARCH 29, 1986 (Date)
7. CASING 4 IN. ☐ STEEL OR ☒ PVC SCH. 40 LENGTH 20 FT.
8. SCREEN 4 IN. ☐ STEEL OR ☒ PVC SCH. 40 SLOT SIZE 10 FT. LENGTH 10 FT.
9. CEMENTED FROM 16 FT. TO GROUND SURFACE, USING ☒ PUMP-DOWN OR ☐ GRAVITY METHOD
10. LOCATION OF WELL: PARISH EAST BATON ROUGE WELL IS NEAR BATON ROUGE, LA (Town or City)
APPROXIMATELY 1/4 MILES FROM PLEASE SEE ATTACHED SITE DRAWING
PLEASE SEE ATTACHED SITE DRAWING (Please draw sketch on back of Original)

11. REMARKS:

12. DRILLER'S LOG (Description and color of cuttings, such as shale, sand, etc. in feet)

FROM	TO	DESCRIPTION	FROM	TO	DESCRIPTION
SUR	2'	LIGHT BROWN SILTY CLAY	20'	23'	TAN SILTY CLAY
2'	5'	TAN CLAY	23'	26'	LIGHT BLUE CLAY
5'	7'	LIGHT BROWN CLAY	26'	28'	TAN CLAY
7'	10'	BROWN CLAY	28'	35'	BLUE CLAY
10'	13'	LIGHT BLUE CLAY			
13'	20'	GRAY CLAY			

13. FOR HEAT PUMP: HOLES ONLY: AVG. DEPTH _____ FT., NUMBER OF HOLES _____

TUBING MATERIAL ☐ PVC, ☐ PS, ☐ PB, ☐ OTHER _____

14. ABANDONMENT INFORMATION: DOES THE NEW WELL REPLACE AN EXISTING WELL? YES ☐ NO ☒
(REV. 11/83) OWNER'S COPY

ENVIRONMENTAL LABORATORIES, INC.
Name of Water Well Contractor
LICENSE NUMBER WWC-287
Authorized Signature [Signature] Date 7-23-86

MAIL ORIGINAL TO:

LOUISIANA DEPARTMENT OF
TRANSPORTATION AND DEVELOPMENT
ATTN: CHIEF - WATER RESOURCES SECTION
P. O. BOX 94245
BATON ROUGE, LA 70804-2425
(504) 378-1434

FOR OFFICE USE ONLY

STATE 22 PARISH 3 LOCAL WELL NO. 11
1 2 3 4 5 6 7 8 9 10 11 12

IDENTIFICATION NUMBER 303303091103918
OWNER'S NAME EVANON PLASTICS

WELL DEPTH 42 Ft. Use of Well 46 47 48
NO. YR. 0386 49 50 51 52

Date Com-pleted 0386
OWNER'S NO. 1017 Unit 57 Geologic 53

CONTRACTOR'S NAME EVANON PLASTICS
SECTION 054 TOWNSHIP 045 RANGE 01W
HOLE DEPTH 30 ELEV. 30 QUAD NO. 30

Inspected By _____
Date _____
Remarks _____

C-K ASSOCIATES, INC.

SOIL BORING LOG

PROJECT NUMBER: 25-287	PROJECT NAME: Monitoring Well MW-12a Installation	
BORING NUMBER: B-12a	COORDINATES: 30-33'-05", 91-10'-54"	DATE STARTED: 03/04/01
ELEVATION: 68-47	GWL: 2.9 feet bgs	DATE COMPLETE: 03/07/01
C-K REPRESENTATIVE ON SITE: Joe Harrer / Wayne Abshire		
DRILLING METHODS: CME - 75 with hollow stem augers		PAGE 1 OF 1

DEPTH FEET	SAMPLE TIME	SAMPLE METHOD	GROUND WATER LEVELS	OVA READINGS (ppm)	DESCRIPTION	USCS SYMBOL	ENVIRONMENTAL IMP. OBSERVATIONS
0'	N/A	Auger cuttings		N/A	Loose dark brown clayey silt w/shell material	ML	No odors or indication of contamination
2'			#		Soft dark brown silty clay	CL	(0' - 29.5')
4'					Medium light gray clay w/silt	CL	
6'							
8'							
10'							
12'							
14'							
16'			@				
18'					Stiff tan clay	CH	
20'							
22'							
24'							
26'							
28'							
30'							

NOTES:

Boring terminated at 29.5 feet and completed as monitoring well MW-12a.

= Groundwater after 24 hours

@ = Groundwater first encountered

WATER BORE SECTION

LOUISIANA DEPARTMENT OF
WATER RESOURCES
WATER WELL REGISTRATION SHORT FORM (DOTD-GW-15)

PLEASE PRINT IN INK OR TYPE WHEN COMPLETING THIS FORM

1. USE OF WELL (Check Appropriate Box)
☐ DOMESTIC ☐ IRRIGATION ☒ MONITORING ☐ HEAT PUMP SUPPLY
☐ HEAT PUMP HOLE ☐ ABANDONED PILOT HOLE ☐ OTHER (Please Specify)
2. WELL OWNER BOON PLASTICS PHONE 504 778-5211
3. ADDRESS 11675 HIGHWAY 19 BATON ROUGE, LOUISIANA 70807
4. OWNER'S WELL NUMBER OR NAME (if any) 12-A
5. DATE COMPLETED MARCH 4, 1991 DEPTH OF HOLE 25 FT. DIAMETER OF WELL 2.5 FT.
6. STATIC WATER LEVEL 7 FT. BELOW GROUND SURFACE MEASURED ON MARCH 6, 1991
7. CASING 4 IN. ☐ STEEL OR ☒ PVC SCH 40 LENGTH 15 FT.
8. SCREEN 4 IN. ☐ STEEL OR ☒ PVC SCH 40 SLOT SIZE .010" LENGTH 10 FT.
9. CEMENTED FROM 15 FT. TO GROUND SURFACE USING ☒ PUMP DOWN (OR ☐ GRAVITY METHOD) WELL IS NEAR BATON ROUGE
10. LOCATION OF WELL PARISH EAST BATON ROUGE MILES FROM HIGHWAY 19 AND THOMAS ROAD
(Closest Road, Railroad, Airport, etc.)

11. REMARKS IN BOON PLASTICS PLANT FACILITY

12. DRILLER'S LOG (Description and color of cuttings, such as shale, sand, etc., in feet)

FROM	TO	DESCRIPTION
0	5	FILL AND CLAY
5	15	CLAY
15	25	SAND AND SILT

13. FOR HEAT PUMP HOLES ONLY: AVG. DEPTH 12.5 FT. NUMBER OF HOLES 1
- TUBING MATERIAL ☐ PVC ☐ PE ☐ PB ☐ OTHER
14. ABANDONMENT INFORMATION: DOES THE NEW WELL IN PLACE AN EXISTING WELL? YES ☐ NO ☐

LAZARUS ENVIRONMENTAL SERVICES
LICENSE NUMBER 1554 MWVC - 401
2-19-91
Authorized Signatory

MAIL ORIGINAL TO:
LOUISIANA DEPARTMENT OF
TRANSPORTATION AND DEVELOPMENT
ATTN: CHIEF, WATER RESOURCES SECTION
P.O. BOX 94243
BATON ROUGE, LA 70804-9243
(504) 378-1434

FOR OFFICE USE ONLY

STATE 22 COUNTY 00 LOCAL WELL NO. 00

DATE COMPLETED 03/05/91 TIME 09:12 AM

WELL DEPTH 25 FT. USE OF WELL MONITORING

Geologic Unit CLAY

CLAY FACTOR 0.00

SECTION 54 SURFACE 140

WELL DEPTH 25 FT. SURFACE 140

Inspected By _____
Date _____
Remarks _____

PROJECT: Exxon Plastics - Baton Rouge, Louisiana

CLIENT: C-K Associates, Inc.

JOB NO.: 50-313

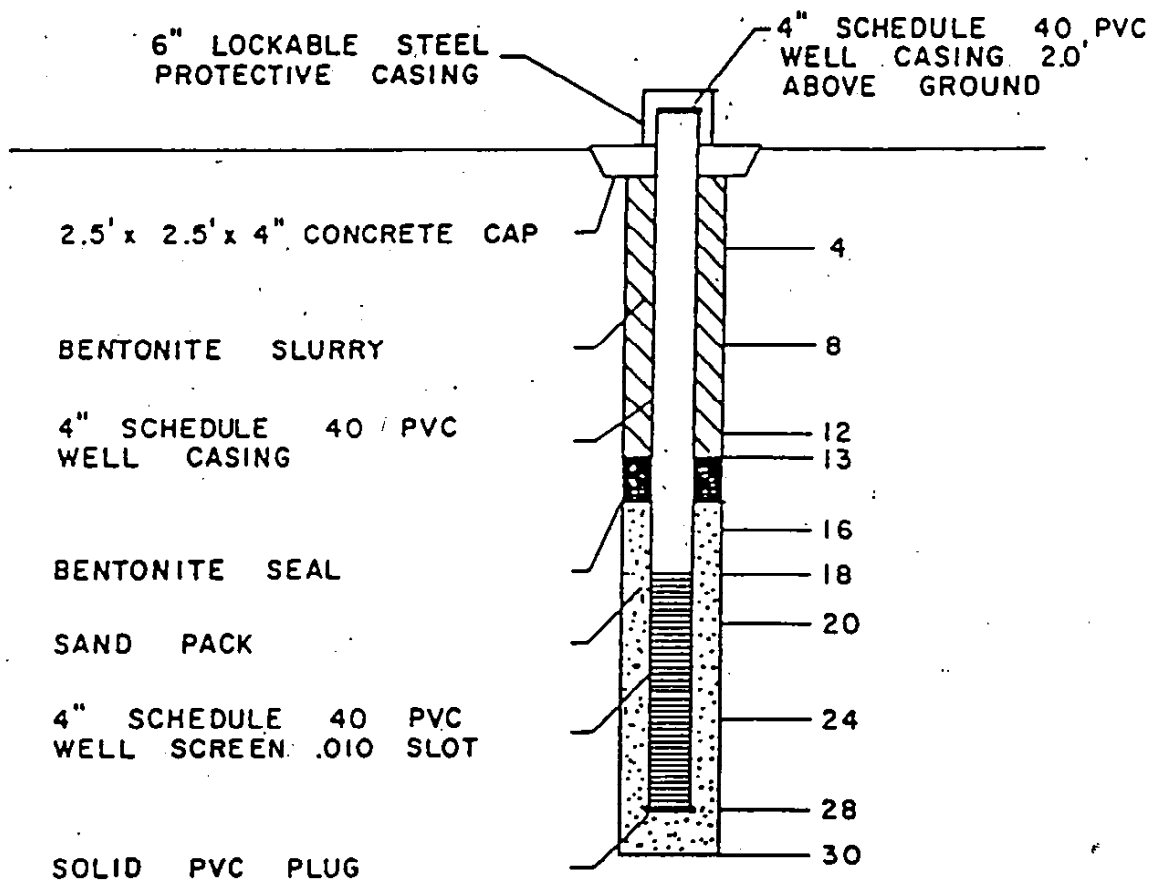
GROUNDWATER LEVEL: 11.13'

JOB REQUEST NO.: 5413

BORING NO.: MW-13

INSTALLATION DATE: March 12, 1986

SAMPLE NO.: 6623



ENVIRONMENTAL LABORATORIES, Inc.

P.O. Drawer 2309 / Gulfport, Mississippi 39505 / (601) 863-3036

VISUAL CLASSIFICATION OF SOILS

JOB NUMBER: 50-313	PROJECT NAME: Exxon Plastics - Baton Rouge, Louisiana	
BORING NUMBER: MW - 13	COORDINATES: Site Drawing	DATE: March 26, 1986
ELEVATION: Existing	GWL: Depth 11.13'	DATE STARTED: 3/12/86
ENGINEER/GEOLOGIST: CAM		DATE COMPLETED: 3/12/86
DRILLING METHODS: Hollow Stem Auger		PAGE 1 OF 1

DEPTH FEET	SAMPLE TYPE & NO.	BLOW ON SAMPLER PER FOOT	RECOVERY INCHES	USCS SYMBOL	SOIL PROFILE	DESCRIPTION
0	SP1	N/A	30	CL		Brown Silty Clay
	SP2	N/A	13	CH		Brown Clay With Traces Of Shell
5	SP3	N/A	29	CH		Brown Clay
	SP4	N/A	18	CL		Gray Silty Clay
10	SP5	N/A	32	CH		Tan Clay
	SP6	N/A	21	CH		Light Tan Clay
15	SP7	N/A	32	CL		Gray Silty Sand
	SP8	N/A	21	CL		Tan Silty Clay
20	SP9	N/A	34	CH		Tan Clay
	SP10	N/A	22	CH		
25	SP11	N/A	32	CH		
	SP12	N/A	21	CH		Blue And Tan Clay
30						

NOTES: SP - Split Spoon
Hole Terminated at 30 Feet

• Top And Bottom Of Screen
— Water Table

WATER WELL REGISTRATION FORM (DOTO-QW-15)

PLEASE PRINT IN INK OR TYPE WHEN COMPLETING THIS FORM

1. USE OF WELL (Check Appropriate Box)
☐ DOMESTIC ☐ R/O SUPPLY ☒ MONITORING ☐ HEAT PUMP SUPPLY
☐ HEAT PUMP HOLE ☐ ABANDONED PILOT HOLE ☐ OTHER (Please Specify)
2. WELL OWNER EXXON PLASTICS PHONE 504, 291-3138
3. ADDRESS 11675 SCOTLAND AVE. BATON ROUGE, LOUISIANA
4. OWNER'S WELL NUMBER OR NAME (If any) MIN-13
5. DATE COMPLETED MARCH 12, 1986 DEPTH OF HOLES 30 FT., DEPTH OF WELL 28 FT.
6. STATIC WATER LEVEL 11.3 FT. BELOW GROUND SURFACE MEASURED ON MARCH 20, 1986 (Date)
7. CASINO 4 IN. ☐ STEEL OR ☒ PVC SCH. 40 LENGTH 18 FT.
8. SCREEN 4 IN. ☐ STEEL OR ☒ PVC SCH. 40 SLOT SIZE 0.10" LENGTH 10 FT.
9. CEMENTED FROM 12 FT. TO GROUND SURFACE, USING ☒ PUMP-DOWN OR ☐ GRAVITY METHOD
10. LOCATION OF WELL: PARISH EAST BATON ROUGE WELL IS NEAR BATON ROUGE, LA (Town or City)
APPROXIMATELY N/A MILES FROM PLEASE SEE ATTACHED SITE DRAWING
PLEASE SEE ATTACHED SITE DRAWING (Crossroad, Railroad, Any Landmark, etc.)
(Please draw sketch on back of Original)

11. REMARKS:

12. DRILLER'S LOG (Description and color of cuttings, such as shale, sand, etc. in feet)

FROM	TO	DESCRIPTION	FROM	TO	DESCRIPTION
SUR	3'	BROWN SILTY CLAY	15'	18'	GRAY SILTY SAND
3'	5'	BROWN CLAY WITH TRACES OF SHELL	18'	20'	TAN SILTY SAND
5'	8'	BROWN CLAY	20'	28'	TAN CLAY
8'	10'	GRAY SILTY CLAY			
10'	13'	TAN CLAY			
13'	15'	LIGHT TAN CLAY			

13. FOR HEAT PUMP HOLES ONLY: AVO. DEPTH _____ FT., NUMBER OF HOLES _____

TUBING MATERIAL ☐ PVC, ☐ PS, ☐ PB, ☐ OTHER _____

14. ABANDONMENT INFORMATION: DOES THE NEW WELL REPLACE AN EXISTING WELL? YES ☐ NO ☒
(REV. 11/85) OWNER'S COPY

NAME OF WATER WELL CONTRACTOR
LOUISIANA DEPT. OF TRANSPORTATION AND DEVELOPMENT
ATTN: CHIEF - WATER RESOURCES SECTION
BATON ROUGE, LA 70804-3248
(504) 378-1434

MAIL ORIGINAL TO:

LOUISIANA DEPARTMENT OF
TRANSPORTATION AND DEVELOPMENT
ATTN: CHIEF - WATER RESOURCES SECTION
P. O. BOX 94243
BATON ROUGE, LA 70804-3248
(504) 378-1434

FOR OFFICE USE ONLY

STATE 22 PARISH 3 LOCAL WELL NO. 11

1 2 3 4 5 6 7 8 9 10 11

IDENTIFICATION NUMBER

3033980911105410
12
EXXON PLASTICS
27 WELL DEPTH
43 45 47 49 51

USE OF WELL
43 45 47 49 51

DATE COMPLETED
MO. 03 DAY 16 YEAR 86

OWNER'S NO. 53 GEOLOGIC UNIT 57

CONTRACTOR'S NAME
ENCLAB

SECTION 054 TOWNSHIP 045 RANGE 011

HOLE DEPTH 28 ELEV. 011 QUAD. NO. 011

INSPECTED BY _____

DATE _____

REMARKS _____

PROJECT: Exxon Plastics - Baton Rouge, Louisiana

CLIENT: C-K Associates, Inc.

JOB NO.: 50-313

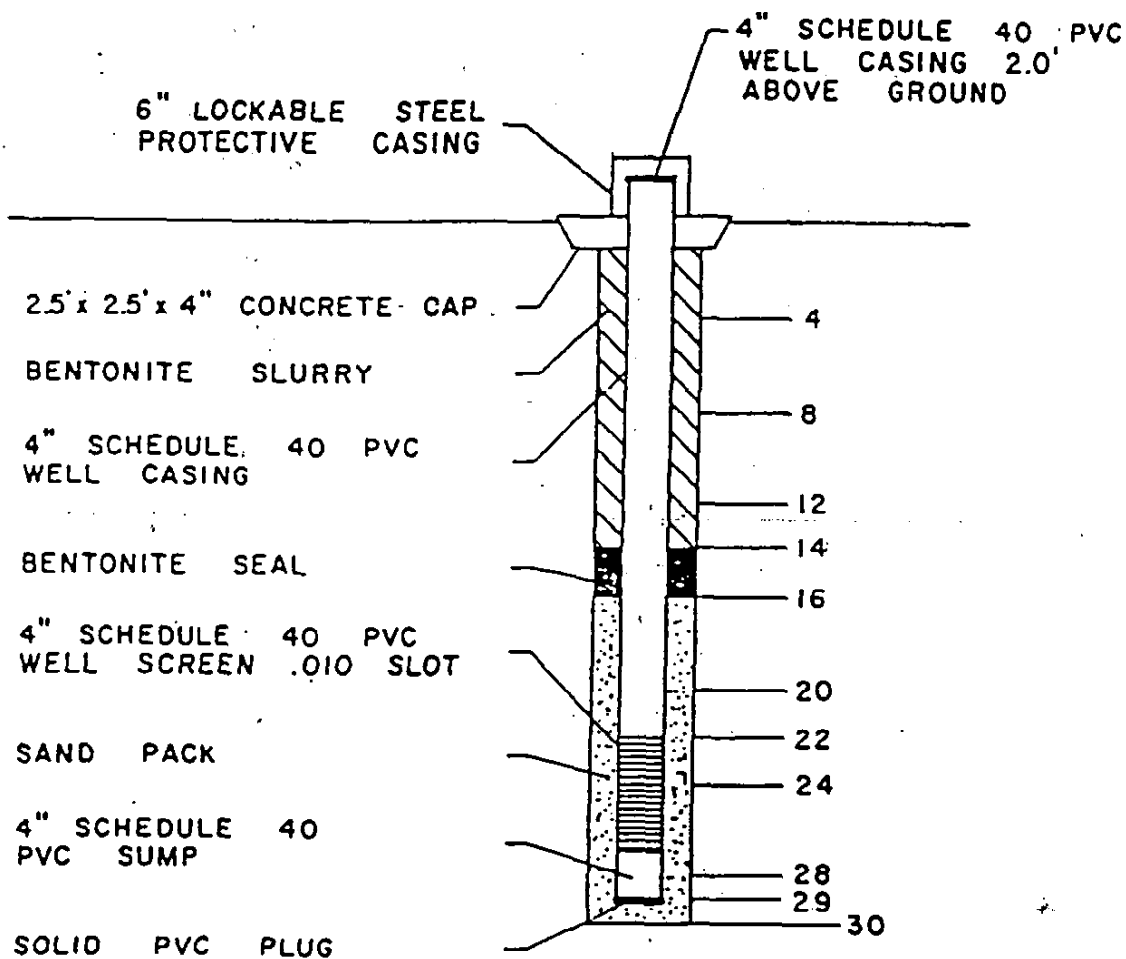
GROUNDWATER LEVEL: 9.00'

JOB REQUEST NO.: 5413

BORING NO.: MW-14

INSTALLATION DATE: March 10, 1986

SAMPLE NO.: 6623



ENVIRONMENTAL LABORATORIES, Inc.

P.O. Drawer 2309 / Gulfport, Mississippi 39505 / (601) 863-3036

VISUAL CLASSIFICATION OF SOILS

JOB NUMBER: 50-313	PROJECT NAME: Exxon Plastics - Baton Rouge, Louisiana	
BORING NUMBER: HW - 14	COORDINATES: Site Drawing	DATE: March 26, 1986
ELEVATION: Existing	GWL: Depth 9.00'	DATE STARTED: 3/10/86
ENGINEER/GEOLOGIST: CAM		DATE COMPLETED: 3/10/86
DRILLING METHODS: Hollow Stem Auger		PAGE 1 OF 1

DEPTH FEET	SAMPLE TYPE & NO.	BLOW ON SAMPLER PER FOOT	RECOVERY INCHES	USCS SYMBOL	SOIL PROFILE	DESCRIPTION
0	SP1	N/A	16	CL		Light Tan Silty Clay
	SP2	N/A	36	CL		Light Brown Silty Clay
5	SP3	N/A	36	CH		Tan Clay
	SP4	N/A	24	CH		Light Tan Clay
10	SP5	N/A	0-	CH		
15	SP6	N/A	29	CH		Gray Clay
	SP7	N/A	24	CH		Tan Clay
20	SP8	N/A	36	CH		Gray And Tan Clay With White Chalky Particles
	SP9	N/A	24	CL		Tan Silty Clay
25	SP10	N/A	36	CH		Gray And Tan Clay
	SP11	N/A	24	CH		Tan Clay
30						

NOTES: SP - Split Spoon
Hole Terminated at 30 Feet

• Top And Bottom Of Screen
— Water Table

WATER RESOURCES SECTION
WATER WELL REGISTRATION REPORT FORM (DOTD-GW-15)

PLEASE PRINT IN INK OR TYPE WHEN COMPLETING THIS FORM

1. USE OF WELL (Check Appropriate Box)
☐ DOMESTIC ☐ RIG SUPPLY ☒ MONITORING ☐ HEAT PUMP SUPPLY
☐ HEAT PUMP HOLE ☐ ABANDONED PILOT HOLE ☐ OTHER (please specify) _____
2. WELL OWNER: EXXON MOBIL PLASTICS PHONE: (504) 291-3138
3. ADDRESS: 11675 SCOTLAND AVE, BATON ROUGE, LOUISIANA
4. OWNER'S WELL NUMBER OR NAME (if any): MW-14
5. DATE COMPLETED: MARCH 10 1986 DEPTH OF HOLE: 30 FT. DEPTH OF WELL: 29 FT.
(DATE)
6. STATIC WATER LEVEL: 9.00 FT. BELOW GROUND SURFACE MEASURED ON: MARCH 20, 1986
(DATE)
7. CASING: 4 IN. ☐ STEEL OR ☒ PVC SCH. 40 LENGTH: 22 FT.
8. SCREEN: 4 IN. ☐ STEEL OR ☒ PVC SCH. 40 SLOT SIZE: 0.00" LENGTH: 5 FT.
9. CEMENTED FROM: 14 FT. TO GROUND SURFACE, USING ☒ PUMP-DOWN OR ☐ GRAVITY METHOD
10. LOCATION OF WELL: PARISH EAST BATON ROUGE WELL IS NEAR: BATON ROUGE, LA (TOWN OR CITY)
APPROXIMATELY 0.4 MILES FROM PLEASE SEE ATTACHED SITE DRAWING
PLEASE SEE ATTACHED SITE DRAWING (Crossroads, Railroad, Any Landmark, etc.)
(Please draw sketch on back of Original)
11. REMARKS: _____

12. DRILLER'S LOG (Description and color of cuttings, such as shale, sand, etc. in feet)

FROM	TO	DESCRIPTION	FROM	TO	DESCRIPTION
SUR	2'	LIGHT TAN SILTY CLAY	20'	23'	GRAY SAND CLAY
2'	5'	LIGHT BROWN SILTY CLAY	23'	25'	WITH WANE CHALK/PARTICLES
5'	8'	TAN CLAY	25'	28'	TAN SILTY CLAY
8'	15'	LIGHT TAN CLAY	28'	20'	GRAY AND TAN CLAY
15'	18'	GRAY CLAY			TAN CLAY
18'	20'	TAN CLAY			

13. FOR HEAT PUMP HOLES ONLY: AVG. DEPTH _____ FT., NUMBER OF HOLES _____

TUBING MATERIAL ☐ PVC, ☐ PE, ☐ PB, ☐ OTHER _____

14. ABANDONMENT INFORMATION: DOES THE NEW WELL REPLACE AN EXISTING WELL? YES ☐ NO ☒

ENVIRONMENTAL LABORATORY
Name of Water Well Contractor
LICENSE NUMBER: MWC-212
Authorized Signature: [Signature] Date: 2-3-86

MAIL ORIGINAL TO:

LOUISIANA DEPARTMENT OF
TRANSPORTATION AND DEVELOPMENT
ATTN: CHIEF - WATER RESOURCES SECTION
P.O. BOX 94245
BATON ROUGE, LA 70804-0245
(804) 378-1434

FOR OFFICE USE ONLY

STATE: 22 PARISH: 3 LOCAL WELL NO.: 11
IDENTIFICATION NUMBER: 303310091105124
OWNER'S NAME: EXXON MOBIL PLASTICS
WELL DEPTH: 29 FT. Use of Well: 37

Date Completed: 03/06/86
OWNER'S NO.: 0514 Geologic Unit: 37
CONTRACTOR'S NAME: ENVIRONMENTAL LABORATORY
SECTION: 0514 TOWNSHIP: 063 RANGE: 04W
HOLE DEPTH: 29 ELEV.: 000 QUAD NO.: 000

Inspected By: _____
Date: _____
Remarks: _____

ENVIRONMENTAL LABORATORIES, Inc.

P.O. Drawer 2309 / Gulfport, Mississippi 39505 / (601) 863-3036

TYPE OF TEST: Soil Classification

DATE: March 26, 1986

CLIENT: Exxon Plastics - Baton Rouge, Louisiana

JOB NO: 50-313

PROJECT: C-K Associates, Inc.

JOB REQUEST NO: 5413

TYPE MATERIAL TESTED: Listed Below

SAMPLE NO: 6623

LOCATION: Listed Below

SAMPLE IDENTIFICATION	SIEVE SIZE	PERCENT PASSING	ATTERBURG LIMITS	MOISTURE CONTENT	PERMEABILITY
MW - II	No. 10	99.8	L.L. 76	26.4%	3.225 x 10 ⁻⁸
SP 8, 20' - 23'	No. 40	99.4	P.L. 24		
	No. 60	99.3	P.I. 52		
	No. 200	96.1			

CLASSIFICATION: CH

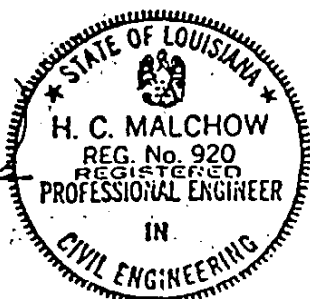
TYPE MATERIAL TESTED: Tan Silty Clay

MW - II	No. 10	100.0	L.L. 25	22.1%	--
SP 10, 25' - 28'	No. 40	100.0	P.L. 17		
	No. 60	99.9	P.I. 8		
	No. 200	99.0			

CLASSIFICATION: CL

TYPE MATERIAL TESTED: Tan Clay

H. C. Malchow
Louisiana Registration
Number 920



Allen D. Randall
Lab Director
Physical Division

ENVIRONMENTAL LABORATORIES, Inc.

P.O. Drawer 2309 / Gulfport, Mississippi 39505 / (601) 863-3036

TYPE OF TEST: Soil Classification

DATE: March 26, 1986

CLIENT: Exxon Plastics - Baton Rouge, Louisiana

JOB NO: 50-313

PROJECT: C-K Associates, Inc.

JOB REQUEST NO: 5413

TYPE MATERIAL TESTED: Listed Below

SAMPLE NO: 6623

LOCATION: Listed Below

SAMPLE IDENTIFICATION	SIEVE SIZE	PERCENT PASSING	ATTERBURG LIMITS	MOISTURE CONTENT	PERMEABILITY
MW - 12	No. 10	100.0	L.L. 33	30.0%	2.387 x 10 ⁻⁹
SP 8, 18' - 20'	No. 40	100.0	P.L. 20		
	No. 60	100.0	P.I. 13		
	No. 200	98.7			

CLASSIFICATION: CL

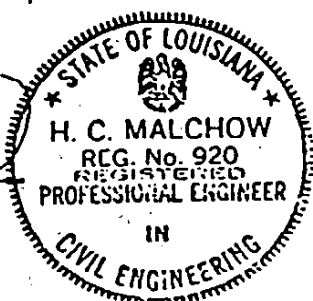
TYPE MATERIAL TESTED: Dark Gray Silty Clay

MW - 12	No. 10	99.9	L.L. 99	33.6%	--
SP 10, 23' - 25'	No. 40	99.6	P.L. 25		
	No. 60	99.5	P.I. 74		
	No. 200	99.4			

CLASSIFICATION: CH

TYPE MATERIAL TESTED: Light Blue Clay

H. C. Malchow
H. C. Malchow
Louisiana Registration
Number 920



Allen D. Randall
Allen D. Randall
Lab Director
Physical Division

ENVIRONMENTAL LABORATORIES, Inc.

P.O. Drawer 2309 / Gulfport, Mississippi 39505 / (601) 863-3036

TYPE OF TEST: Soil Classification

DATE: March 26, 1986

CLIENT: Exxon Plastics - Baton Rouge, Louisiana

JOB NO: 50-313

PROJECT: C-K Associates, Inc.

JOB REQUEST NO: 5413

TYPE MATERIAL TESTED: Listed Below

SAMPLE NO: 6623

LOCATION: Listed Below

SAMPLE IDENTIFICATION	SIEVE SIZE	PERCENT PASSING	ATTERBURG LIMITS	MOISTURE CONTENT	PERMEABILITY
MW - 13	No. 10	79.4	L.L. 37	25.2%	6.870×10^{-9}
SP 4, 8' - 10'	No. 40	74.0	P.L. 25		
	No. 60	73.5	L.I. 12		
	No. 200	70.7			

CLASSIFICATION: CL

TYPE MATERIAL TESTED: Gray Silty Clay

MW - 13	No. 10	100.0	L.L. 88	41.5%	3.147×10^{-9}
SP 9, 20' - 23'	No. 40	99.5	P.L. 27		
	No. 60	99.4	P.I. 61		
	No. 200	97.9			

CLASSIFICATION: CH

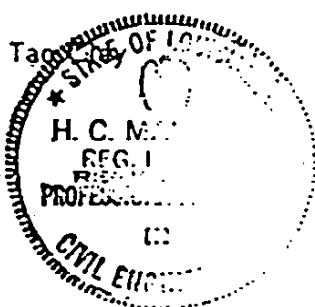
TYPE MATERIAL TESTED: Tan Clay

MW - 13	No. 10	100.0	L.L. 68	31.6%	--
SP 10, 23' - 25'	No. 40	100.0	P.L. 20		
	No. 60	100.0	P.I. 48		
	No. 200	99.2			

CLASSIFICATION: CH

TYPE MATERIAL TESTED: Tan Clay

H. C. Malchow
H. C. Malchow
Louisiana Registration
Number 920



Allen D. Randall
Allen D. Randall
Lab Director
Physical Division

ENVIRONMENTAL LABORATORIES, Inc.

P.O. Drawer 2309 / Gulfport, Mississippi 39505 / (601) 863-3036

TYPE OF TEST: Soil Classification

DATE: March 26, 1986

CLIENT: Exxon Plastics - Baton Rouge, Louisiana

JOB NO: 50-313

PROJECT: C-K Associates, Inc.

JOB REQUEST NO: 5413

TYPE MATERIAL TESTED: Listed Below

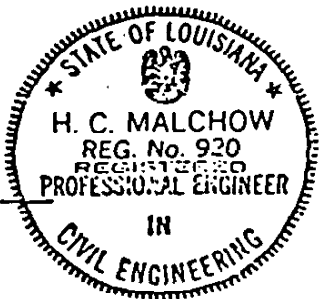
SAMPLE NO: 6623

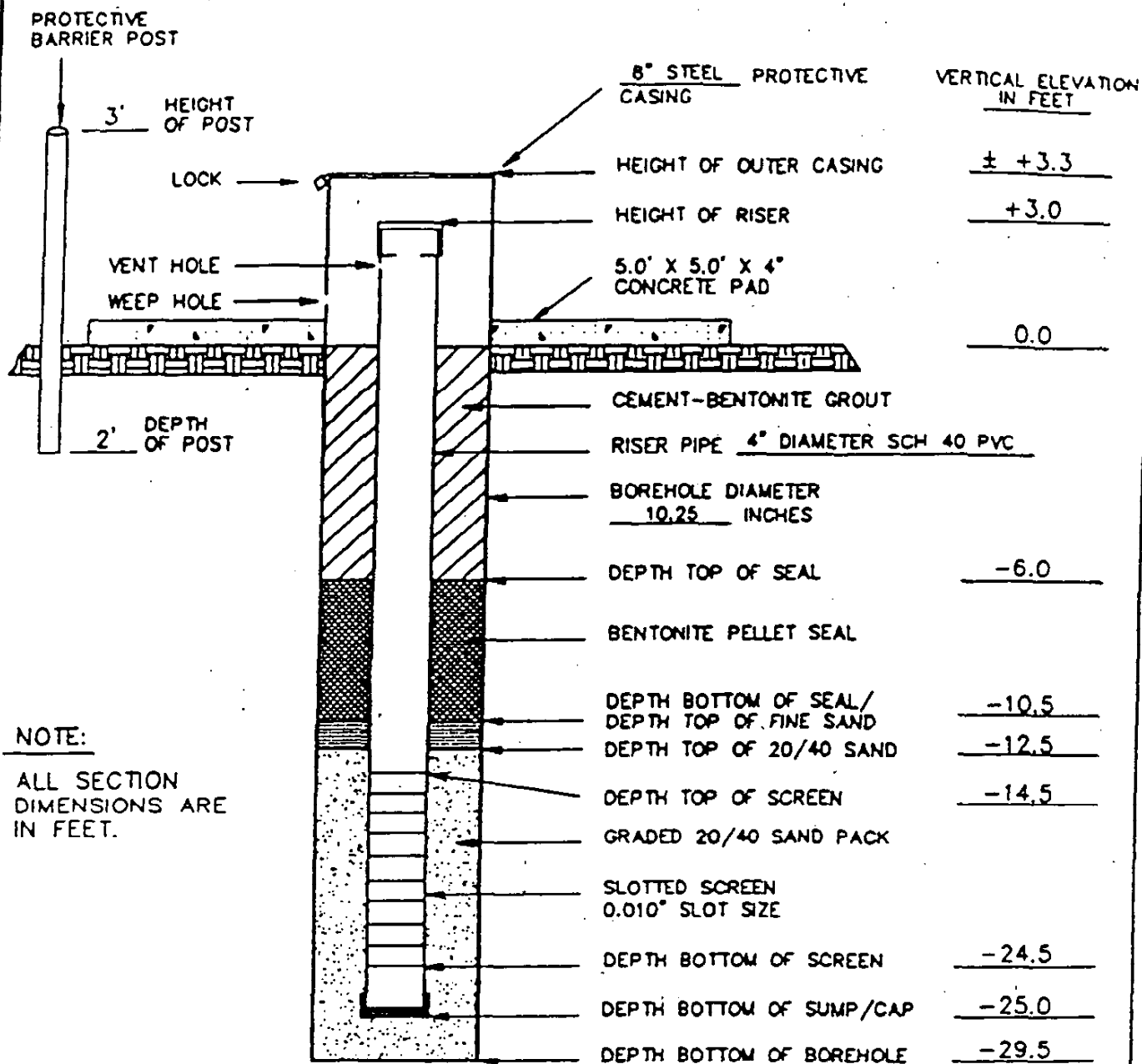
LOCATION: Listed Below

SAMPLE IDENTIFICATION	SIEVE SIZE	PERCENT PASSING	ATTERBURG LIMITS	MOISTURE CONTENT	PERMEABILITY
MW - 14	No. 10	98.9	L.L. 41	41.0%	2.360 x 10 ⁻⁵
SP 9, 23' - 25'	No. 40	98.3	P.L. 19		
	No. 60	98.1	P.I. 22		
	No. 200	98.0			

CLASSIFICATION: CL

TYPE MATERIAL TESTED: Tan Silty Clay

H. C. Malchow
Louisiana Registration
Number 920Allen D. Randall
Lab Director
Physical Division



NOTE:

ALL SECTION DIMENSIONS ARE IN FEET.

SECTION VIEW

NOT TO SCALE

MONITOR WELL ID	MW-12A
ELEV. TOP OF RISER	68.47'
ELEV. GROUND SURFACE	65.45'
SCREEN INTERVAL	14.5' - 24.5'
DATE INSTALLED	3/7/91

CONSTRUCTION NOTES:

REMARKS:

NO.	BY	EXXON COMPANY, U.S.A.	
	DATE	BATON ROUGE REFINERY	
	REVISION	MONITORING WELL CROSS SECTION	
		C-K ASSOCIATES, INC.	
		BATON ROUGE, LOUISIANA	
	DRAWN DUE/ACAD	APPROVED SFM	
	CHECKED JH	DATE MARCH 11, 1991	
	SHEET 1 OF 1	DWG. NO. A25-287-67	

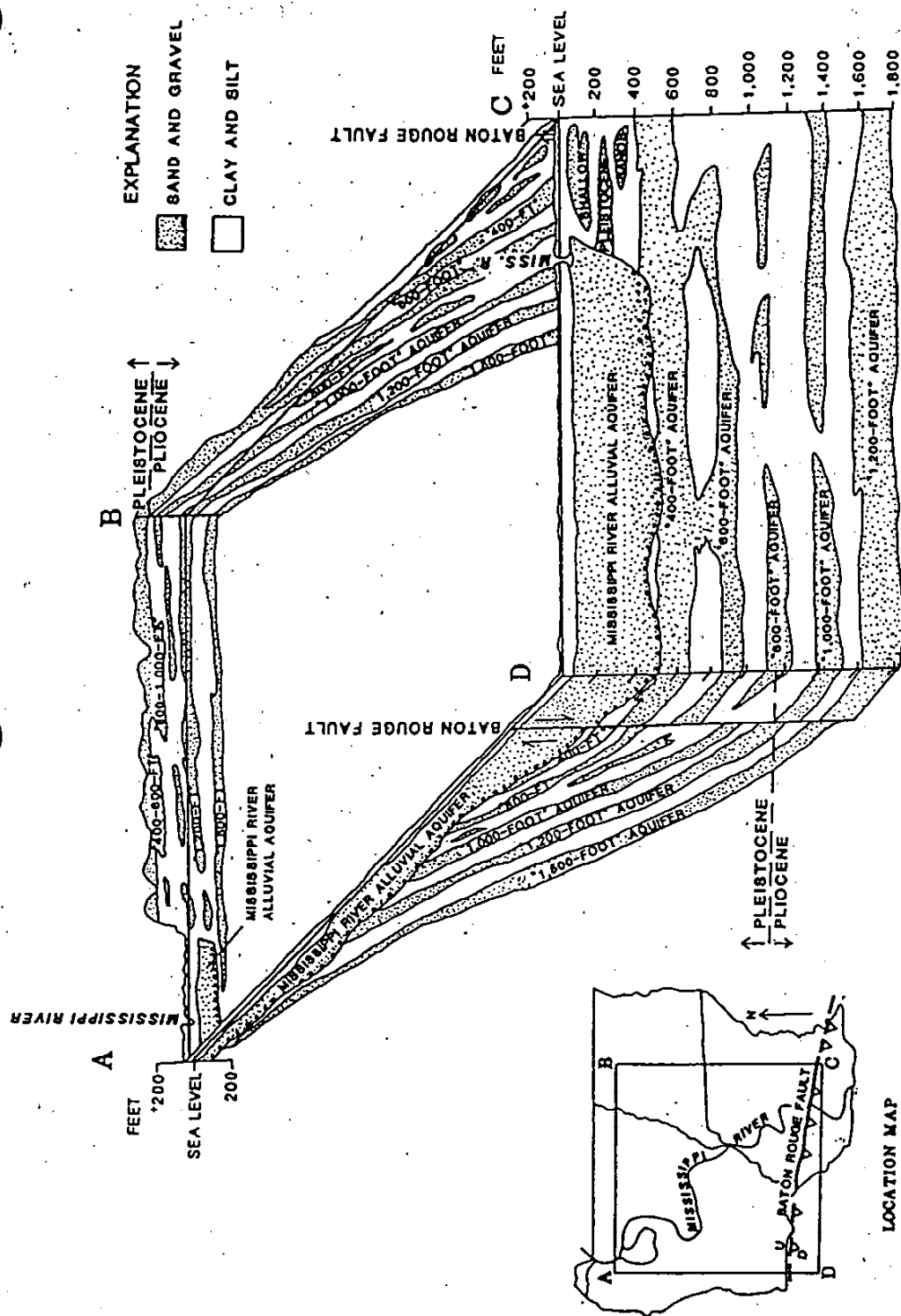
**Inventory Of Water Wells
ExxonMobil BRPP
Baton Rouge, Louisiana**

LDOTD Well Number	Latitude/ Longitude	Owner	Well Depth (feet)	Well Use
40	30°33'01" 91°10'44"	Exxon MTF	1280	Industrial ⁽¹⁾
358	30°32'48" 91°10'53"	Exxon MTF	1302	Industrial ⁽¹⁾
491	30°32'48" 91°10'54"	Exxon MTF	1320	Industrial ⁽¹⁾
570	30°32'52" 91°09'56"	Plantation Pipe	1285	Fire Protection
859	30°33'11" 91°10'48"	BRPP	2440	Industrial
860	30°33'11" 91°10'50"	BRPP	2435	Industrial

⁽¹⁾Although this well is listed as abandoned, it is included because it has not been closed and has the potential to be used in the future.

APPENDIX J

REGIONAL GEOLOGIC CROSS SECTIONS



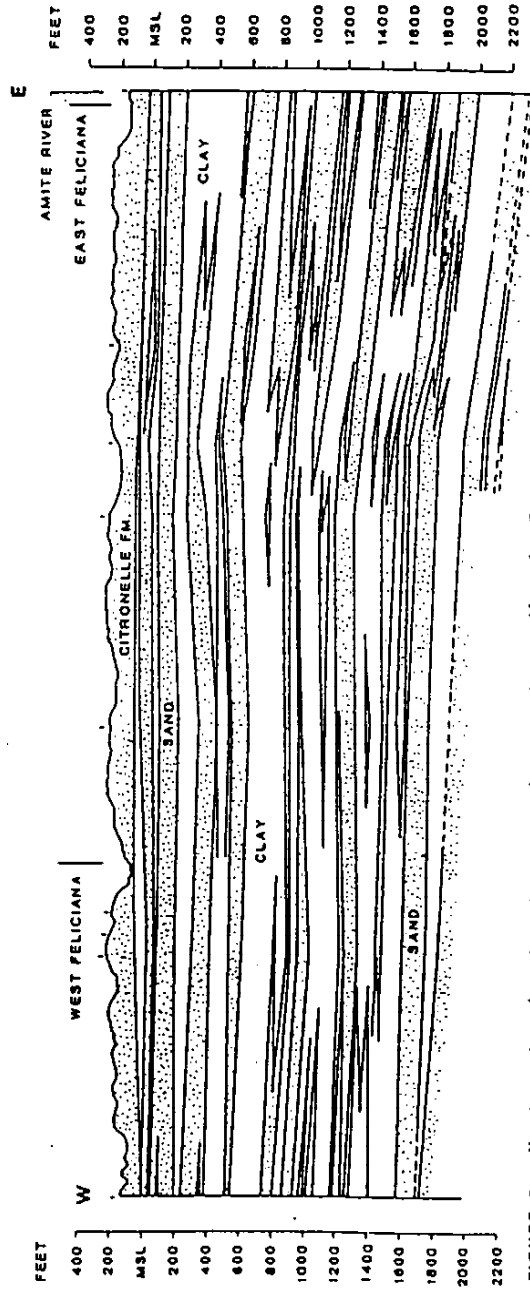
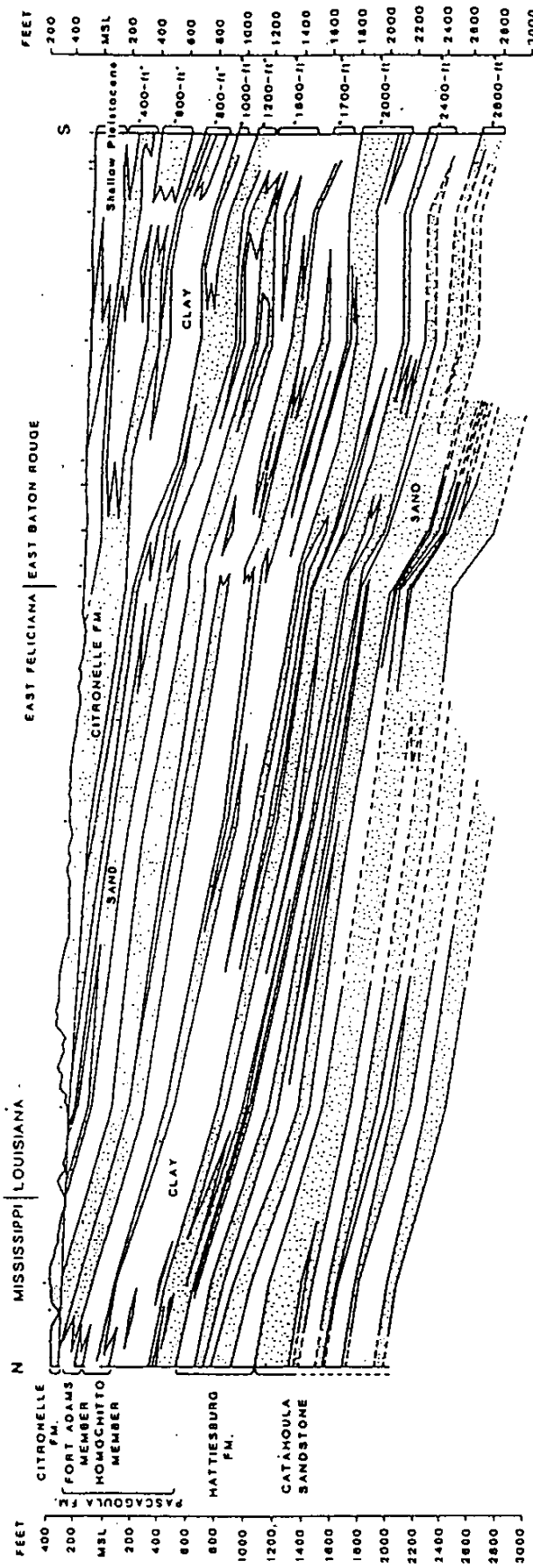
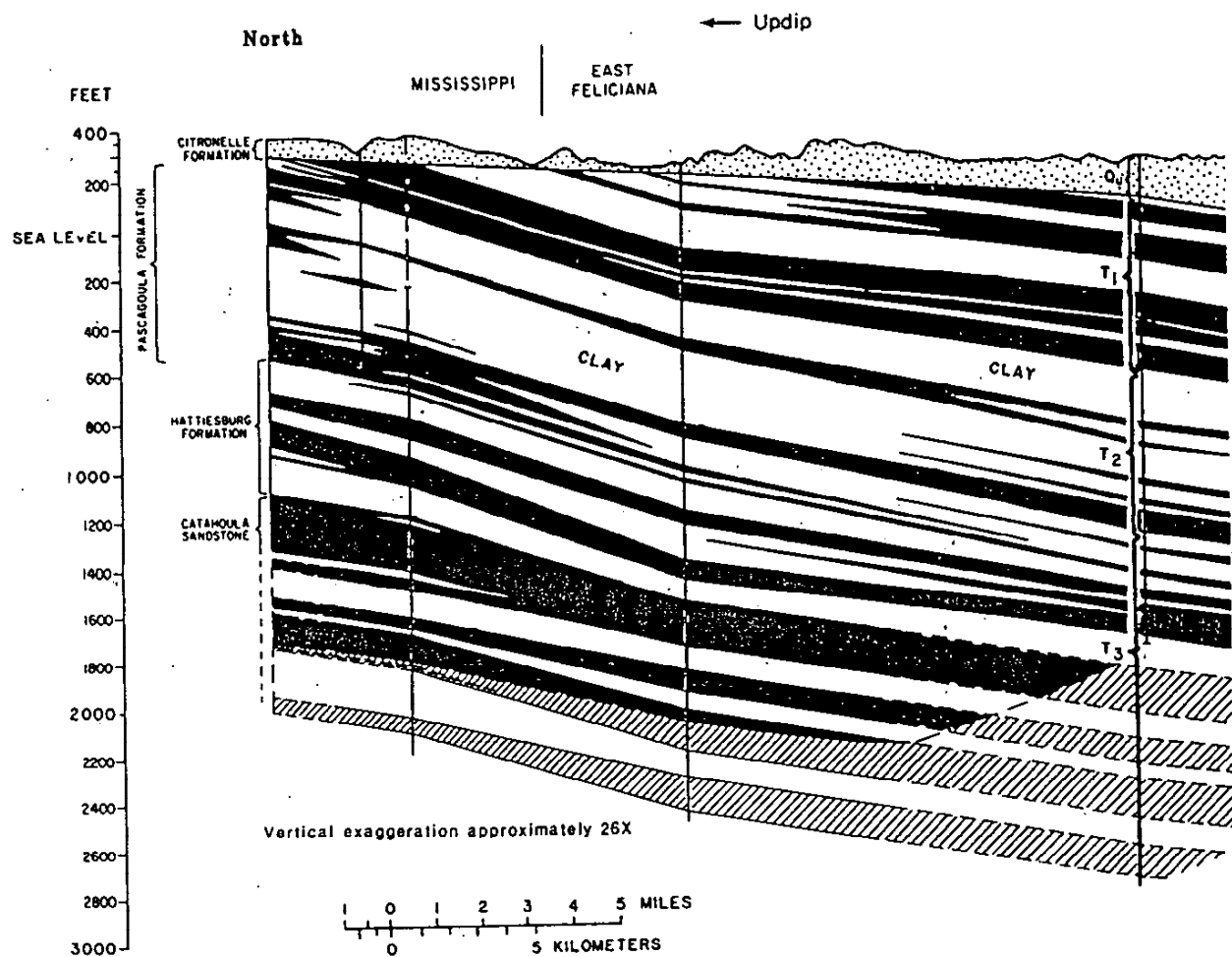


FIGURE 8. North-south and east-west cross sections showing aquifers for East and West Feliciana and East Baton Rouge parishes, Louisiana (modified from Morgan, 1983).

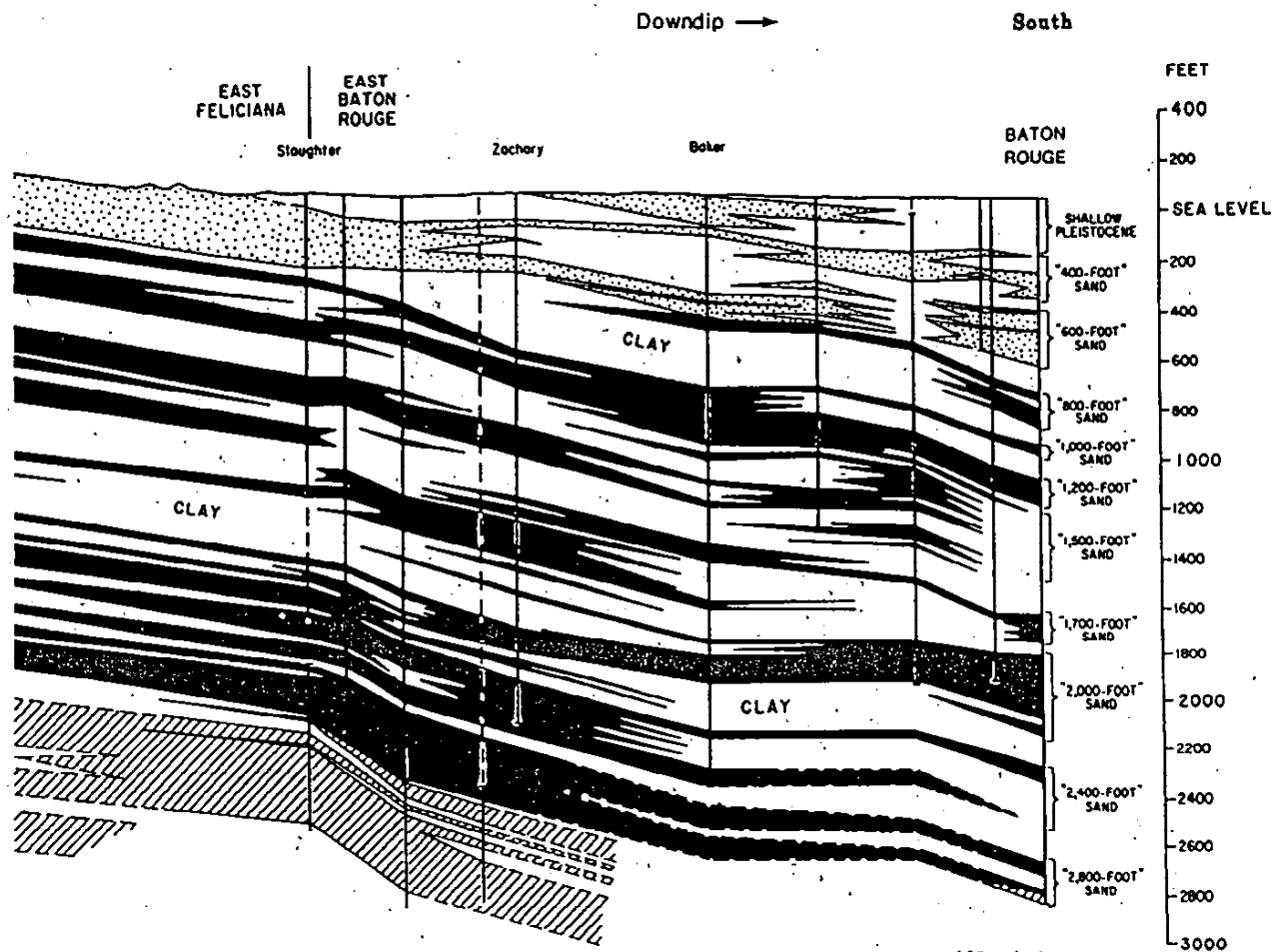


(For section location see figure 2.)




EXPLANATION

- Q_u Quaternary Upland deposits
- T₁ Zone 1
- T₂ Zone 2
- T₃ Zone 3

Figure 3.--Geohydrologic section



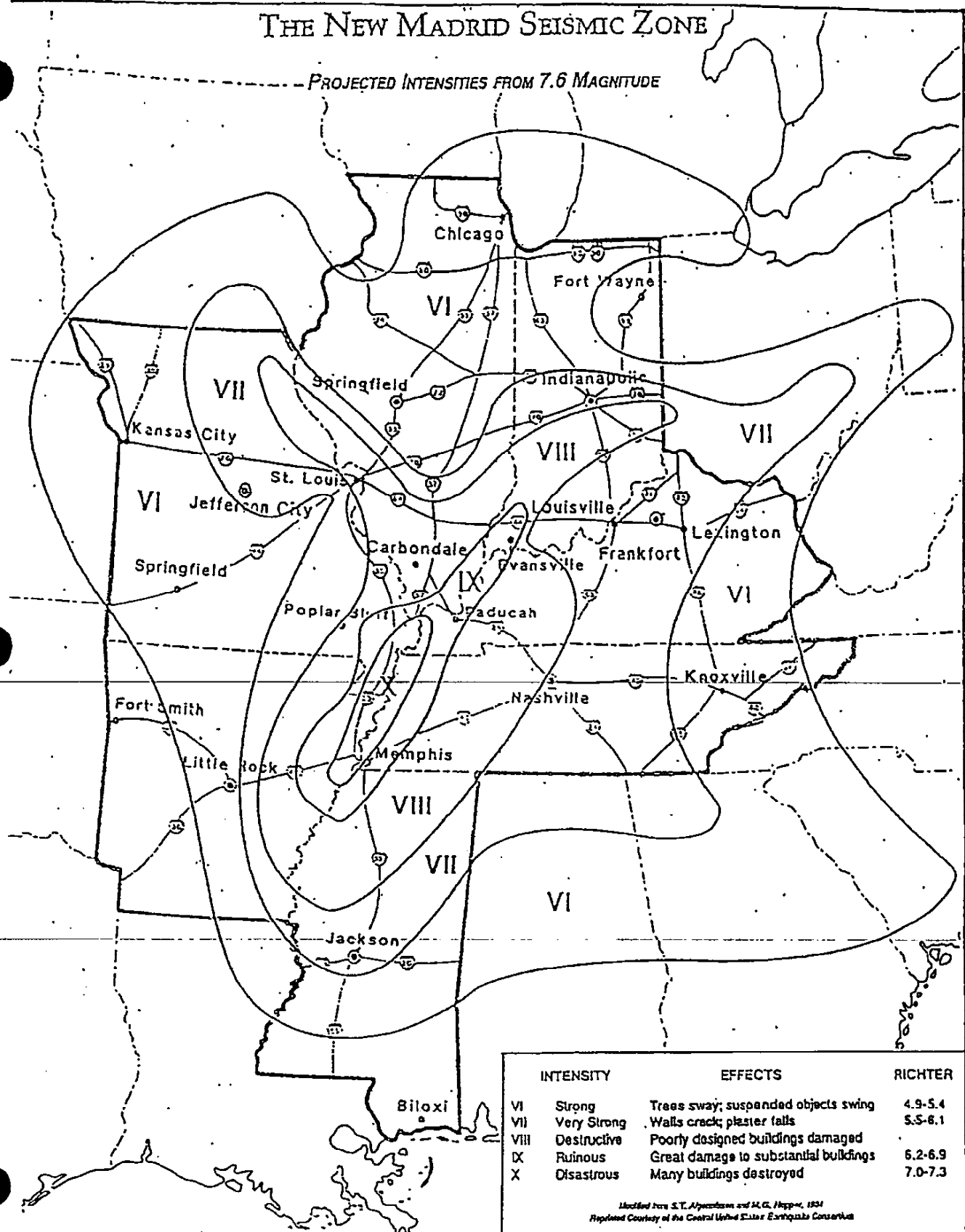
From Morgan, 1963, pl. 1

-  Quaternary aquifers
-  Pliocene and Miocene aquifers
-  Brackish-water aquifers

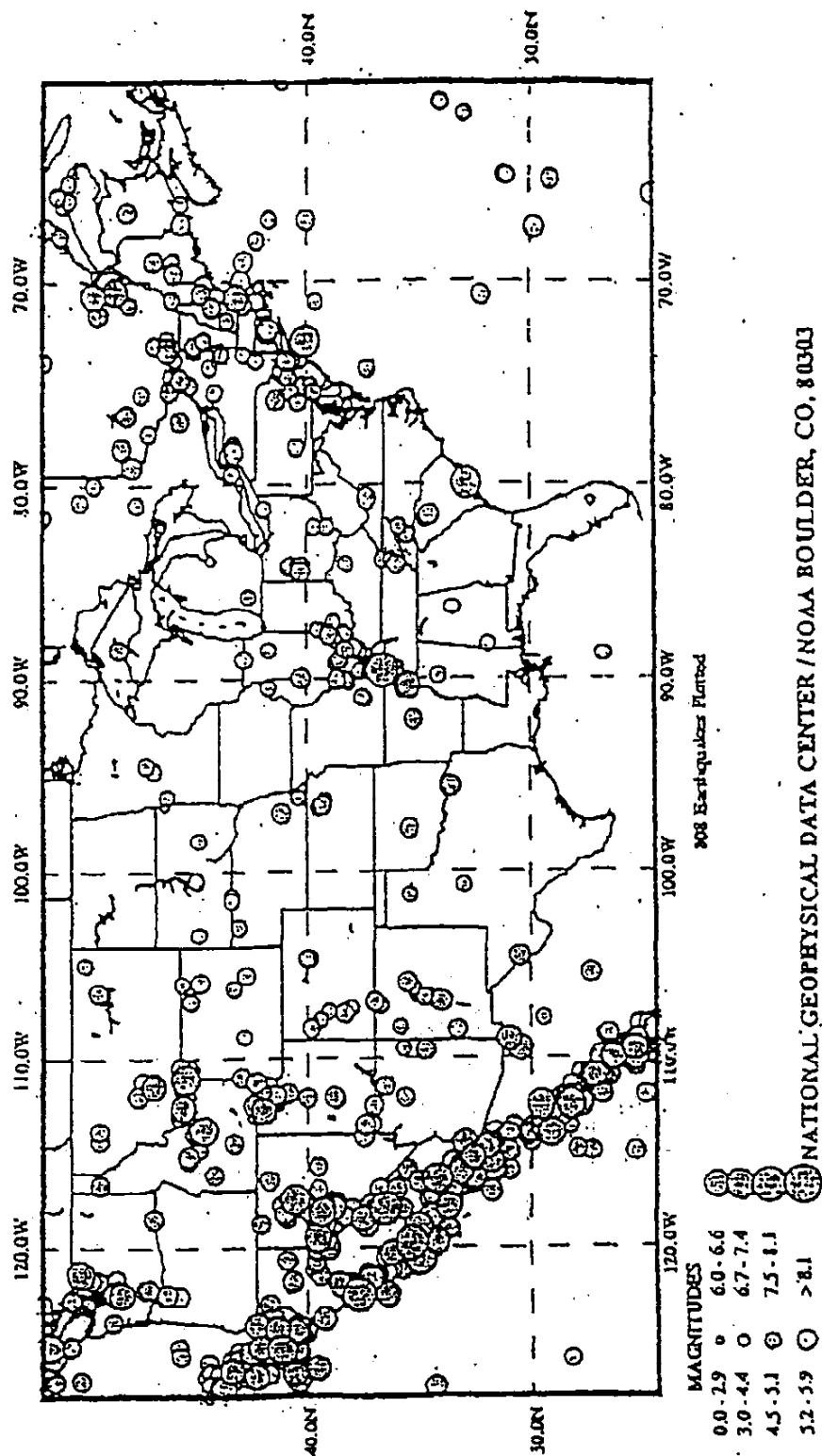
from Mississippi to Baton Rouge.

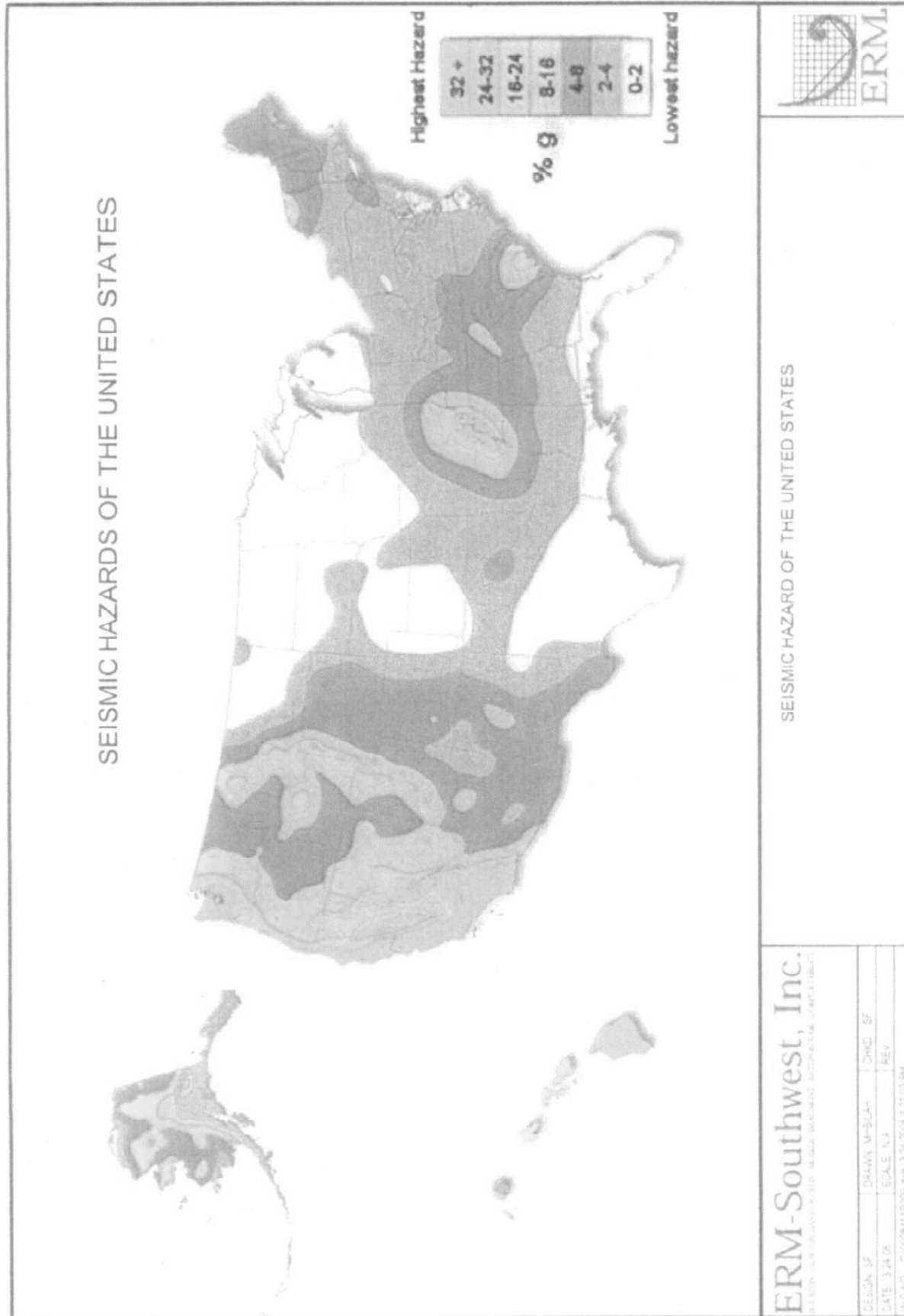
APPENDIX K

DIAGRAMS OF SEISMIC ACTIVITY



SEISMICITY OF THE UNITED STATES 1500 TO MAY 1993 BY EARTHQUAKE MAGNITUDE





APPENDIX L

UPPERMOST AQUIFER POTENTIOMETRIC SURFACE ELEVATIONS AND MAPS

Uppermost Aquifer Potentiometric Surface Elevations

Well Number	TOC (ft msl)	October 22, 1998		April 15, 1999		October 4, 1999		April 5, 2000		Permeable Zone
		DTW (ft)	Pot. Surface Elevation (ft msl)	DTW (ft)	Pot. Surface Elevation (ft msl)	DTW (ft)	Pot. Surface Elevation (ft msl)	DTW (ft)	Pot. Surface Elevation (ft msl)	
MW-10	68.01	6.50	61.51	6.26	61.75	6.30	61.71	6.08	61.93	Uppermost Aquifer
MW-11	68.25	7.58	60.67	6.67	61.58	8.20	60.05	6.67	61.58	Uppermost Aquifer
MW-12A	68.47	7.60	60.87	6.75	61.72	7.85	60.62	7.11	61.36	Uppermost Aquifer
MW-13	72.37	12.90	59.47	13.80	58.57	13.65	58.72	12.29	60.08	Uppermost Aquifer
MW-14	72.92	8.70	64.22	9.78	63.14	9.55	63.37	9.51	63.41	Uppermost Aquifer

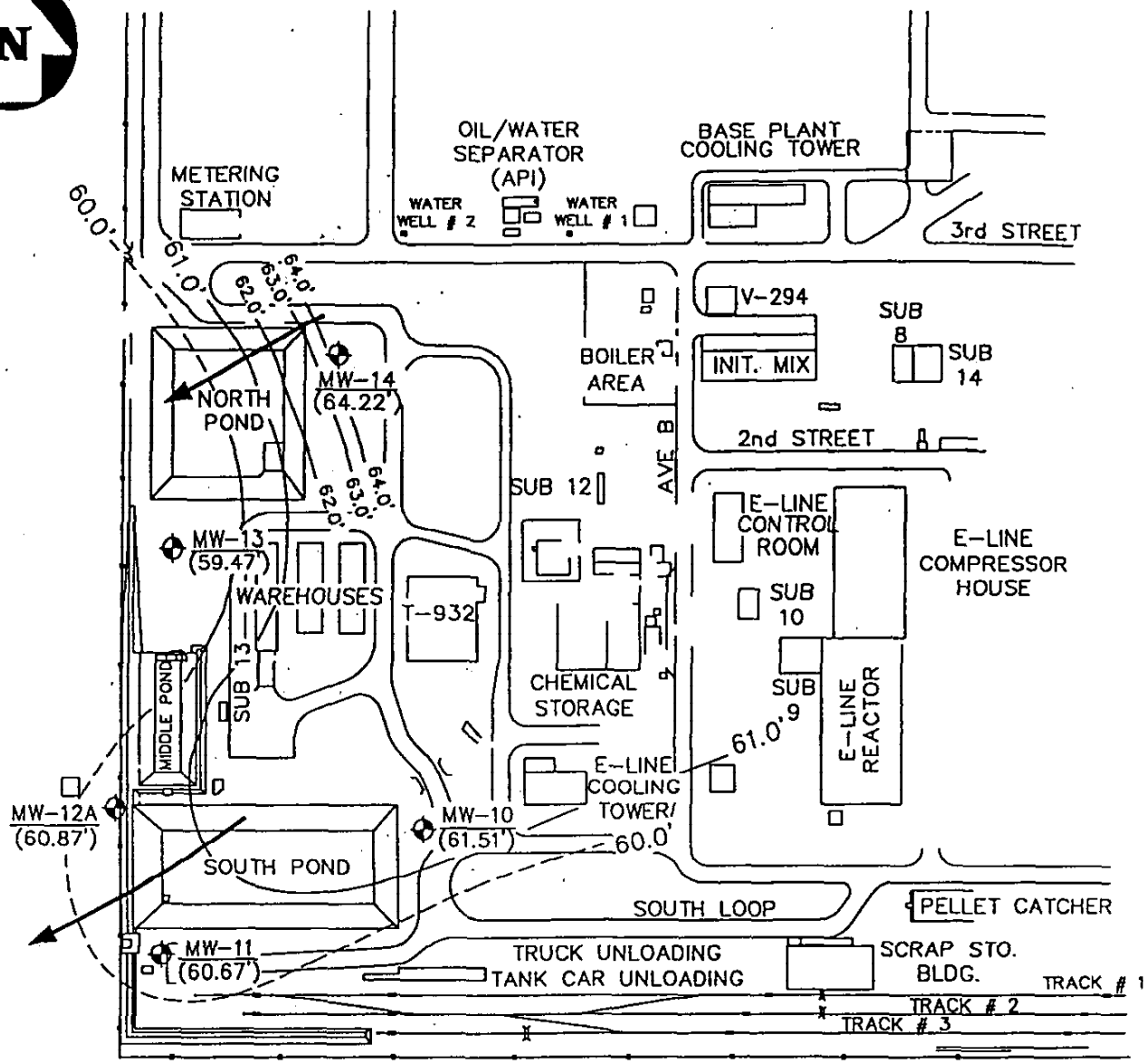
Abbreviations:

TOC = top of casing relative to mean sea level

ft = feet

ft msl = feet relative to mean sea level

DTW = depth to water


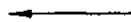



200 0 200
SCALE: 1" = 200'

NOTE:

BASE INFORMATION TAKEN FROM
C-K ASSOCIATES, INC.
DRAWING NO. A25-536-02, DATED 12/16/97B

LEGEND:

- MW-11 (60.67')  MONITORING WELL
GROUNDWATER ELEVATION IN FEET, N.G.V.D.
-  INFERRED GROUNDWATER FLOW DIRECTION
-  61.0' POTENTIOMETRIC CONTOUR IN FEET, N.G.V.D.

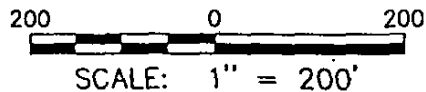
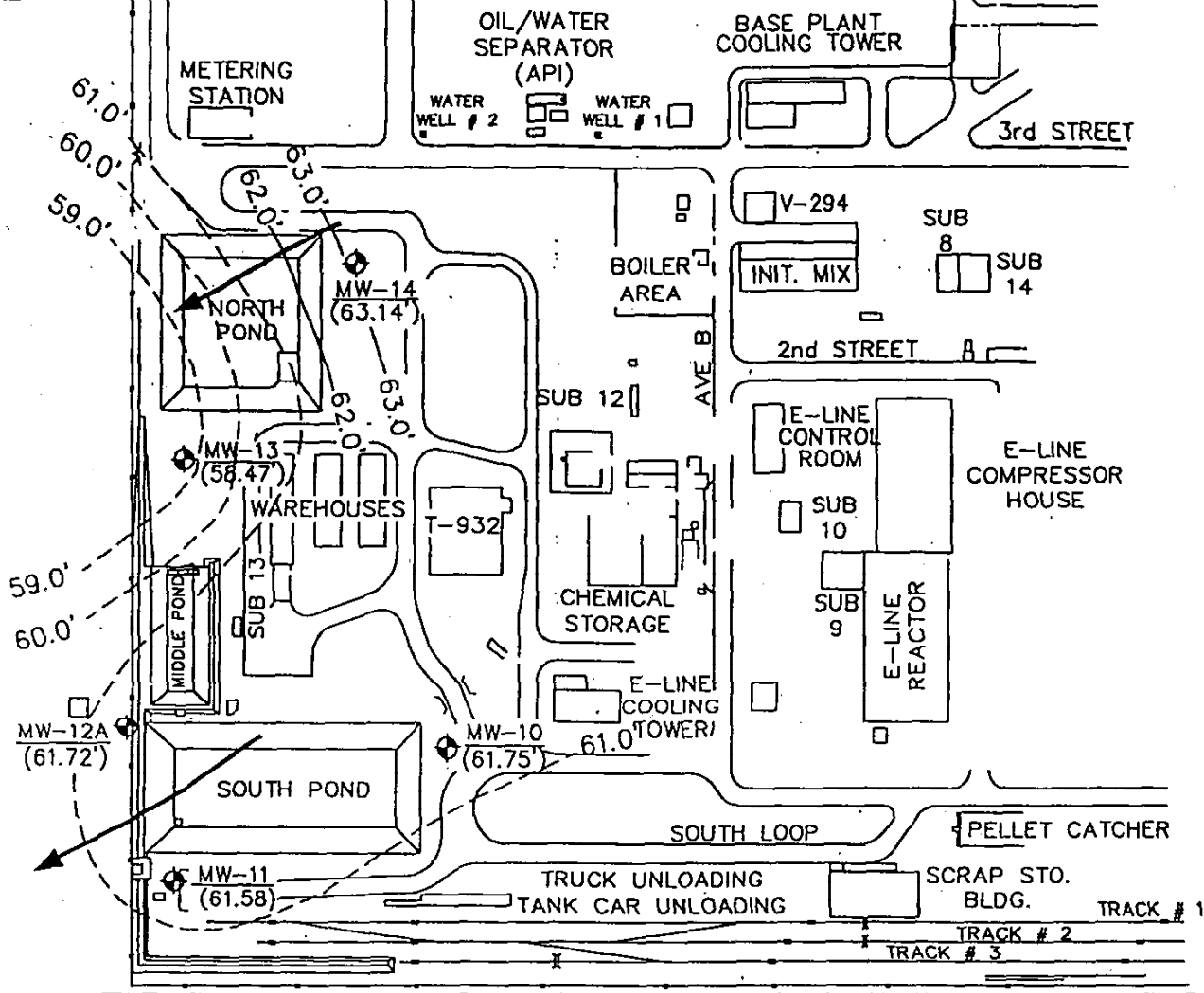
EXXON CHEMICAL COMPANY
BATON ROUGE PLASTICS PLANT

SEMI-ANNUAL GROUNDWATER SAMPLING
POTENTIOMETRIC SURFACE MAP
OCTOBER 21, 1998

EAST BATON ROUGE PARISH, LOUISIANA



Drawn:	JLP
Checked:	RS
Approved:	KDS
Date:	11/11/98
Dwg. No.:	13-0001-05
FIGURE:	3



NOTE:

BASE INFORMATION FROM
C-K ASSOCIATES, INC.
DRAWING NO. A25-536-02. DATED 12/16/97B

LEGEND:

- MW-11 (61.58') MONITORING WELL
- GROUNDWATER ELEVATION IN FEET, N.G.V.D.
- INFERRED GROUNDWATER FLOW DIRECTION
- 61.0' POTENTIOMETRIC CONTOUR IN FEET, N.G.V.D.

EXXON CHEMICAL COMPANY
BATON ROUGE PLASTICS PLANT

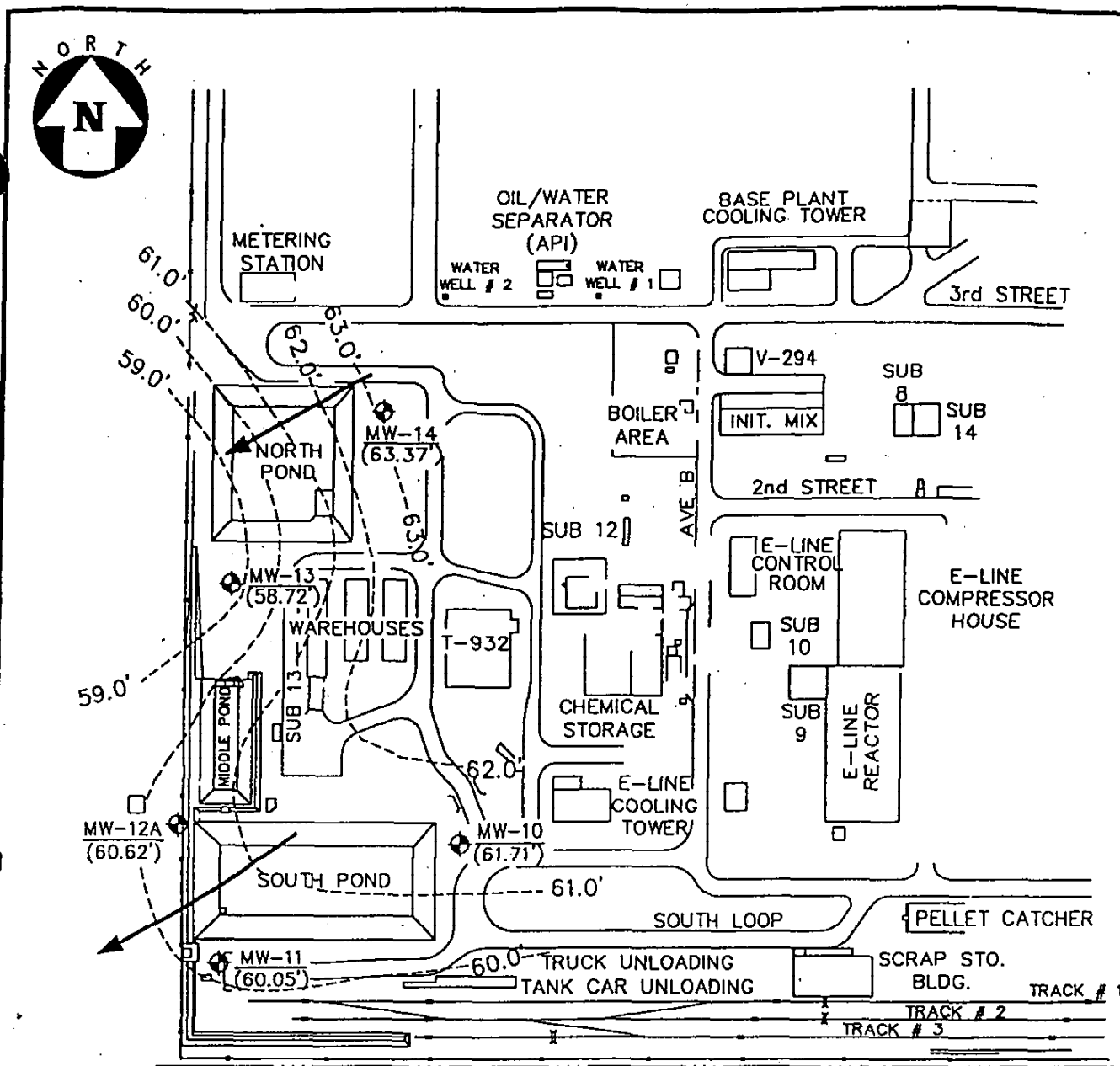
SEMI-ANNUAL GROUNDWATER SAMPLING

POTENTIOMETRIC SURFACE MAP
APRIL 14, 1999

EAST BATON ROUGE PARISH, LOUISIANA



Drawn:	JLP
Checked:	BBM
Approved:	RS
Date:	5/24/99
Dwg. No.:	13-0001-06
FIGURE:	3






200 0 200
SCALE: 1" = 200'

NOTE:

BASE INFORMATION FROM
C-K ASSOCIATES, INC.
DRAWING NO. A25-536-02, DATED 12/16/97B

LEGEND:

- MW-11 (60.05')  MONITORING WELL
GROUNDWATER ELEVATION IN FEET, N.G.V.D.
-  INFERRED GROUNDWATER FLOW DIRECTION
-  61.0'— POTENTIOMETRIC CONTOUR IN FEET, N.G.V.D.

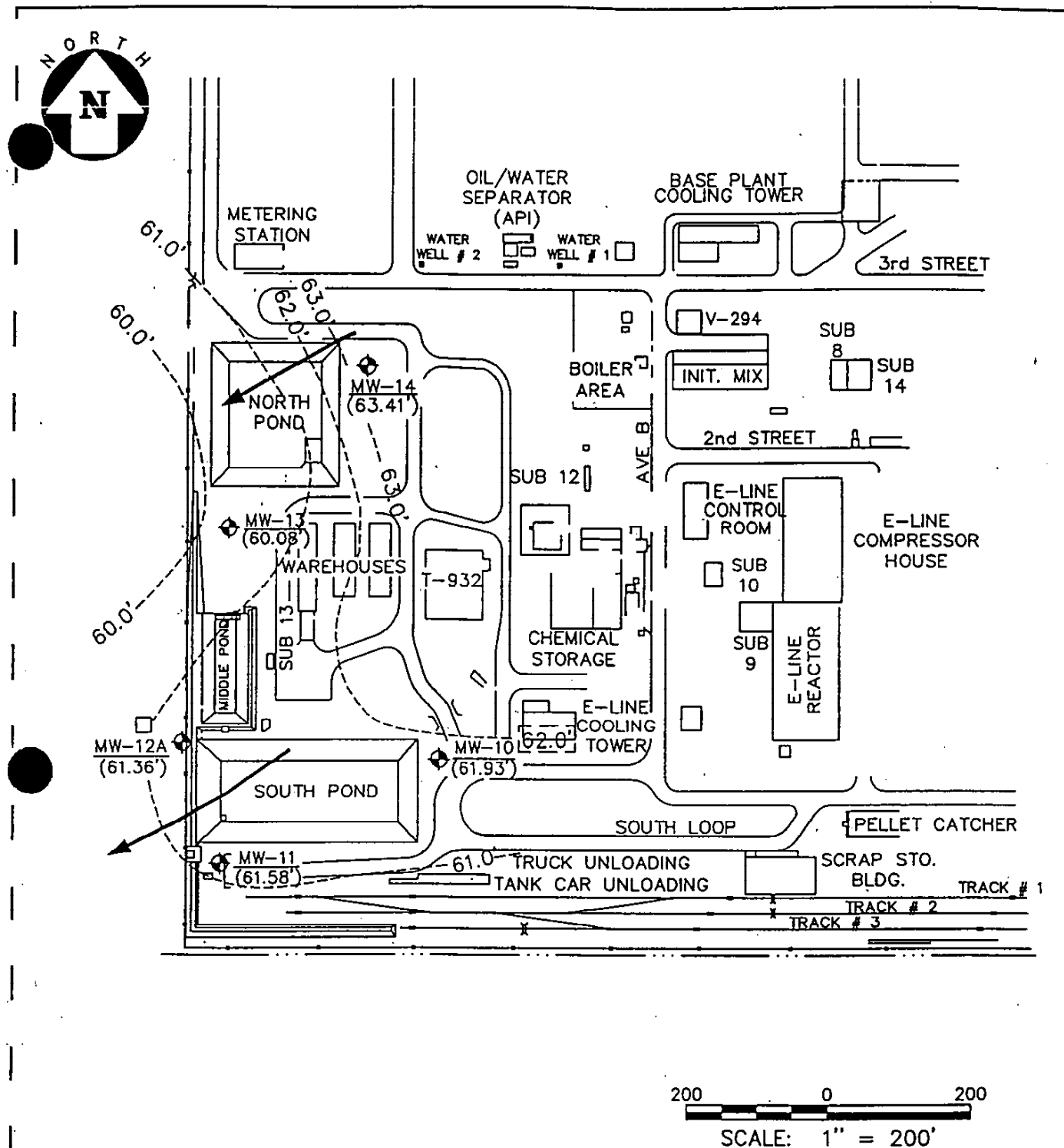
EXXON CHEMICAL COMPANY
BATON ROUGE PLASTICS PLANT

SEMI-ANNUAL GROUNDWATER SAMPLING
POTENTIOMETRIC SURFACE MAP
OCTOBER 4, 1999

EAST BATON ROUGE PARISH, LOUISIANA



Drawn:	SLG
Checked:	BBM
Approved:	RS
Date:	10/26/99
Dwg. No.:	A13-0007-03
FIGURE:	3



ExxonMobil Chemical Company
BATON ROUGE PLASTICS PLANT

SEMI-ANNUAL GROUNDWATER SAMPLING

POTENTIOMETRIC SURFACE MAP
APRIL 4, 2000

EAST BATON ROUGE PARISH, LOUISIANA



Drawn:	JLP
Checked:	RS
Approved:	RS
Date:	5/03/2000
Dwg. No.:	A13-0012-01
FIGURE:	3

MONITORING WELL INFORMATION **ExxonMobil BRPP**

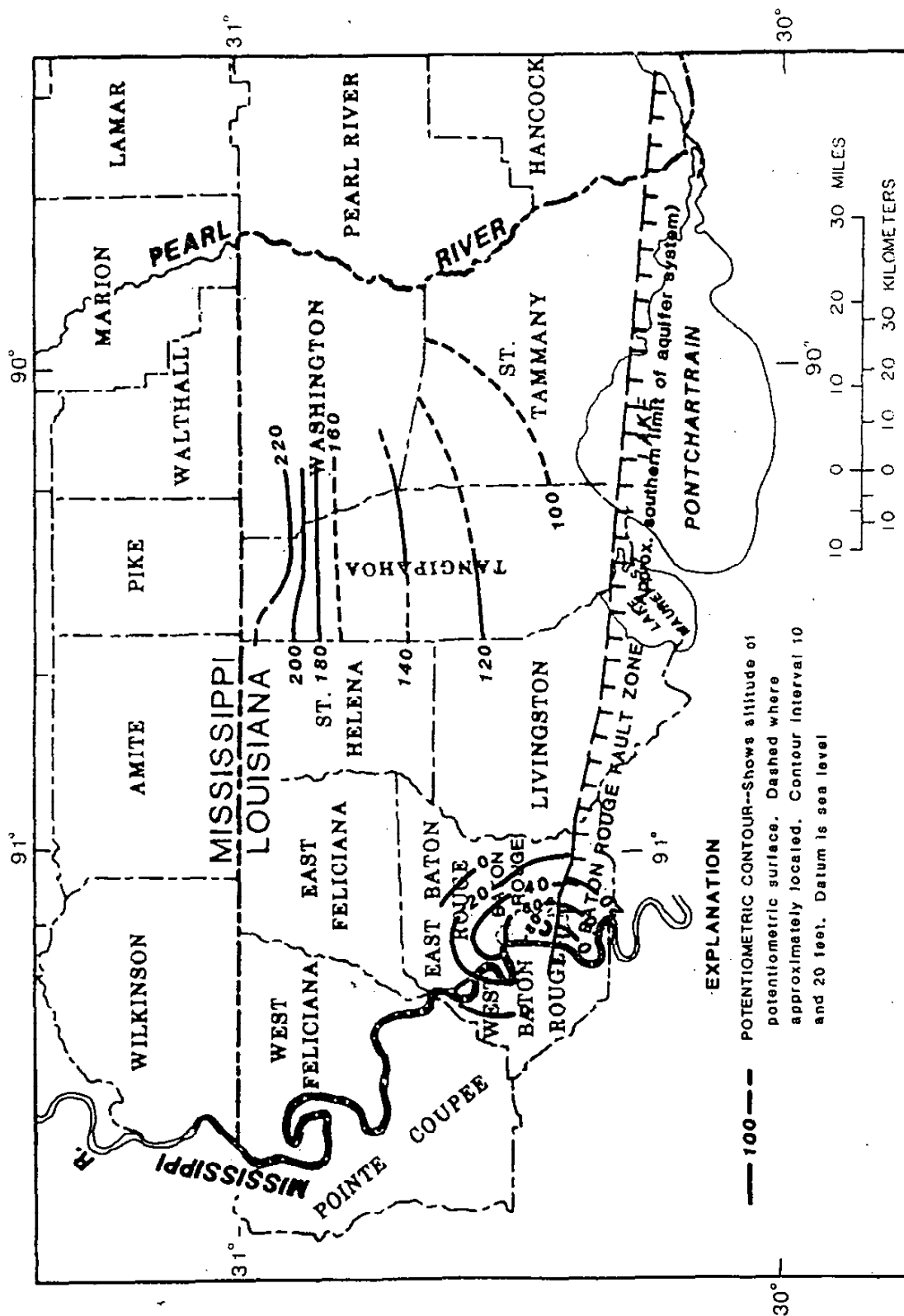
Well Number	MW-10	MW-11	MW-12A	MW-13	MW-14
Up or Down Gradient	Up	Down	Down	Down	Up
Unit Monitored	South Pond	South Pond	Equalization Pond	North Pond	North Pond
Date Installed	3/11/86	3/11/86	3/7/91	3/12/86	3/10/86
Latitude	30°33'04"	30°33'03"	30°33'05"	30°33'08"	30°33'10"
Longitude	91°10'50"	91°10'54"	91°10'54"	91°10'54"	91°10'51"
Casing Elevation (feet NGVD)	68.01	68.25	68.47	72.37	72.92
Well Depth (feet)	25.20	31.03	24.80	29.25	28.50
Screen Length (feet) & Interval (from ___ to ___ feet bgs)	10 15.0-25.0	10 20.0-30.0	10 14.5-24.5	10 18.0-28.0	5 22.0-27.0
Casing Diameter & Material	4" PVC	4" PVC	4" PVC	4" PVC	4" PVC

Abbreviations:
 NGVD = National Geodetic Vertical Datum
 bgs = below ground surface
 PVC = polyvinyl chloride

Note:
 MW-12A replaced MW-12

APPENDIX M

REGIONAL POTENTIOMETRIC SURFACE MAPS



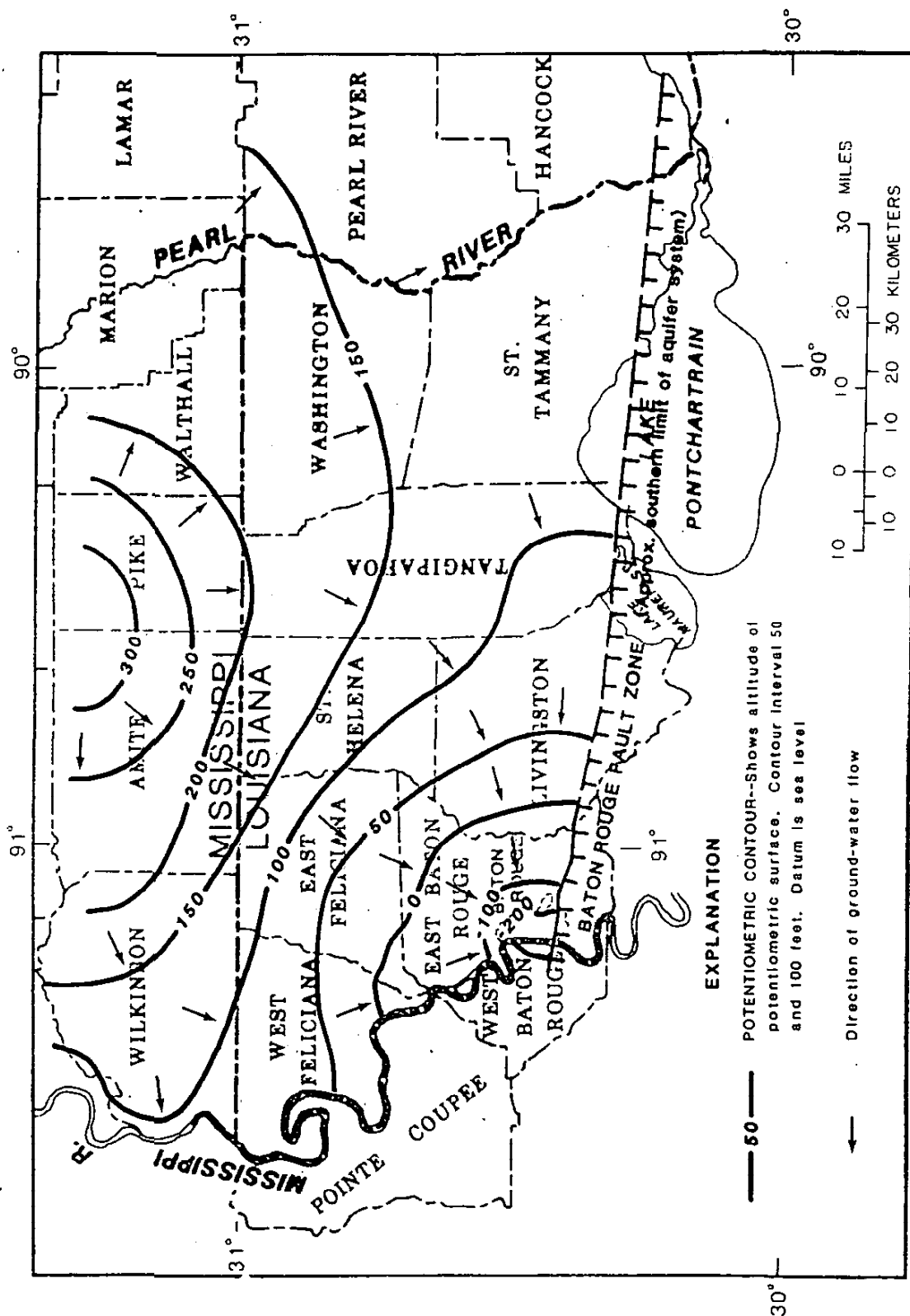


Figure 10.--Potentiometric surface of the "2,000-foot" sand, 1979, computed by a digital ground-water-flow model (after Torak and Whitenan, 1982).

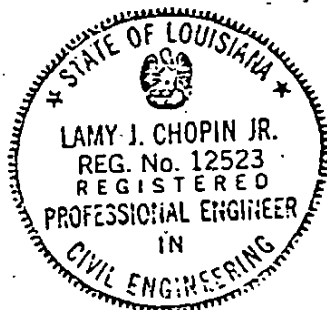
APPENDIX N

CERTIFICATION STATEMENTS

SOLID WASTE MANAGEMENT
PERMIT APPLICATION

Based on review of the design plans and specifications for the industrial solid waste surface impoundments at the Exxon Chemical Americas, Baton Rouge Plastics Plant, I have found that these facilities meet the requirements outlined in the Louisiana Solid Waste Rules and Regulations.

Lamy J. Chopin, Jr.
Printed Name of Registered
Professional Engineer



Lamy J. Chopin Jr.
Signature of Registered
Professional Engineer

Date January 15, 1986 Registration No. 12523 State Louisiana

APPENDIX O

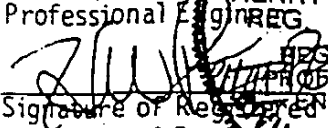
WORK PLAN FOR IMPROVED WASTEWATER HANDLING PROJECT

EXXON CHEMICAL COMPANY
BATON ROUGE PLASTICS PLANT

WORK PLAN
FOR
IMPROVED WASTEWATER HANDLING PROJECT

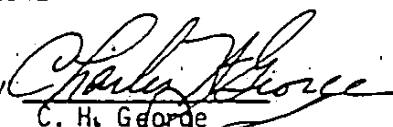
H. W. Pere, III,

Printed Name of Registered
Professional Engineer HENRY W. PERE III
REG. No. 22341

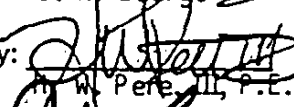

Signature of Registered
Professional Engineer
IN
ENGINEERING

Date: 11/15/92 Registered No. 22341

Prepared By


C. H. George

Reviewed By:


H. W. Pere, III, P.E.

Approved By

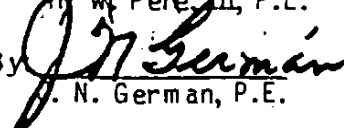

J. N. German, P.E.

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- 2.0 References
- 3.0 Description of Work

II Installation QA/QC Specifications

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- 2.0 Surveying
- 3.0 Impoundment Preparation
- 4.0 Geotextiles
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- 8.0 Defect and Repair Geomembrane Liner
- 9.0 6-Inch Sand Layer
- 10.0 In Field Quality Assurance
- 11.0 Laboratory Testing
- 12.0 Miscellaneous Construction Items

I Summary of Work

Summary of Work

1.0 Location

The work is located at the Exxon Baton Rouge Plastics Plant (BRPP) in East Baton Rouge Parish approximately two miles north of Scotlandville occupying 118 acres. The plant property boundaries are the Thomas Road to the north, Louisiana Highway 19 to the east and the Maryland Tank Farm (MTF) to the south and west. The Maryland Tank Farm is owned and operated by the Exxon Baton Rouge Refinery.

2.0 References

Current editions or revisions of the following codes, specifications, and standards shall apply unless modified in this specification:

- A. Exxon Specifications
- B. Applicable local, parish, state and federal codes, including Occupational Safety and Health Administration (OSHA) codes.
- C. All ASTM standards referenced.

3.0 Description of Work

The work shall include, but not limited to, providing all labor, tools, equipment, materials and supervision to perform the following work as identified in these specifications and on the drawings:

- o Remove existing Hypalon Liner
- o Properly dispose of liner in compliance with state and federal regulations.
- o Remove substandard soil and material under existing Hypalon Liner.
- o Properly dispose of substandard soil and material in compliance with state and federal regulations.
- o Install groundwater relief system using 6" perforated pipe surrounded by a 6" layer of 1" gravel.
- o Reshape ponds to original design after removal of substandard material.
- o Replacement soil to be compacted clay to a permeability of 1×10^{-7} cm/sec.
- o Place geotextile fabric over clay base and pond inside slopes and around ground water relief system piping.
- o Place six(6) inches of sand fill over clay base and groundwater relief system.
- o Place 60 mil HDPE liner over sand fill. HDPE to be installed by vendor.

II Installation QA/QC Specifications

SECTION 1.0

PROJECT GENERAL ORGANIZATION

1.0 Project General Organization

1.1 Safety and Industrial Hygiene

1.1.1 Louisiana State regulations governing control and handling of solid waste and solid waste impoundments shall be the controlling criteria for this project as there are no toxic or hazardous materials or chemicals involved in the removal or installation of the new liners. During construction, work below grade elevations and in sewer penetration areas shall be monitored for gases, combustibles and adequate air content as required by OSHA and Exxon BRPP safety procedures.

1.1.1.1 A copy of the quality control certificates issued by the resin supplier noting the resin supplier's name, resins used, resin production plant and location, liner quality control records and reports on all tests conducted to verify the quality of the HDPE liner and geotextile fabric to be used, must be on record prior to initiation of construction.

1.1.1.2 An evaluation of the site for specific hazards, including airborne contaminants, hazards due to falls, electric shock, hazards from heavy equipment operations and noise levels shall be conducted prior to initiation of work.

1.1.1.3 Safety signs shall be placed in construction area and construction battery limits indicating the following are required: hearing protection, eye protection, safety shoes, long sleeve shirts, hard hats and dust masks (as necessary).

1.1.1.4 Portable eye wash stations shall be maintained in the construction area at all times.

1.1.1.5 Seal welding of liner material does not require open flame heaters, 350-500 watt electric heaters designed specifically for this purpose will be used by trained and certified operators.

1.1.1.6 An Industrial Hygienist shall be on the construction site to monitor soil and air testing prior to and during construction to assure that the proper personnel protection techniques are being used as required.

Since soil analytical results are not available and wastewater chemical levels (hexane, isooctane, vinyl acetate and xylene) in the construction area are available, the outlined procedure shall be followed:

- a. Personnel sampling soil and air at each site prior to construction shall wear proper protective gear under the direction of the Industrial Hygienist (I.H.).

- b. Soil and air testing shall be completed prior to beginning construction.
- c. Work with personnel protective equipment until such precautionary measures are changed by the Industrial Hygienist in writing.
- d. Continue air monitoring during construction phases to determine if a change in protective procedures are necessary.

Note: Chemical levels determined in soil and water do not necessarily correlate directly to air exposure levels, therefore soil testing and air monitoring prior to construction is mandatory.

1.2 Definitions

1.2.1 Contractor's Representative

The on-site individual designated by the General Contractor to receive all instructions from the Client (sometimes referred to as the Contractor or Manufacturer's Representative).

1.2.2 Owner's or Client's Representative

The on-site individual designated by the Owner (or Client) in charge of general daily supervision of the work.

1.2.3 Manufacturer's Representative

The on-site individual designated by a specific product manufacturer to be in charge of directing and supervising the installation of a specific product (ie: geotextile fabric, drainage net, liner, piping system, etc.).

1.2.4 Materials.

1.2.4.1 Clay Levee Material

A material found on-site within the existing levees surrounding the clay impoundment.

1.2.4.2 Clay Impoundment Material or Waste Material

A material found on-site within the confines of the clay impoundment levees.

1.2.4.3 General Fill Material

An earthen, natural clay material imported from off-site sources and classified as CH in accordance with ASTM D2487 (Unified Soil Classification System). The material shall have a Plasticity Index equal to or greater than 25, a Liquid Limit equal to or greater than 45, a moisture content between 2% and 7% above optimum and a Recompacted Permeability less than 1×10^{-7} cm/sec. The material shall be free from all foreign objects and shall not contain any organics, trash, inorganic solid particles, clay lumps or clods that will prevent attaining specified compaction. Moisture content should be at or wet of optimum.

1.2.4.4 Sand Material

Shall be a non-plastic natural or pumped river sand with no more than 10% passing the No. 200 sieve in accordance with ASTM C117 and ASTM C136. The river sand shall be free from trash, weeds or other foreign or deleterious material.

1.2.5 Material Properties

1.2.5.1 Atterberg Limits

The liquid limit, plastic limit, and shrinkage limit for soils (ASTM D4318). The water content when the soil behavior changes from the liquid to the plastic state and from the semi-solid to the solid state is the shrinkage limit.

1.2.5.2 Classification

The classification of the soil by the Unified Soil Classification System (ASTM D2487). Visual classification is accomplished following ASTM D2488.

1.2.5.3 Compaction

The process of increasing the density or unit weight of soil by rolling, tamping, vibrating, or other mechanical means.

1.2.5.4 Degree of Compaction

The dry density obtained in the field divided by the maximum dry density for that material as obtained in the Standard Proctor Compaction Test (ASTM D698), usually expressed as a percentage.

1.2.5.5 Density

Mass density of a soil is its weight per unit volume; usually reported in pounds per cubic foot.

1.2.5.6 Moisture Content

Ratio of quantity of water in the soil (by weight) to the weight of the soil solids (dry soil), expressed in percentage; also referred to as water content.

1.2.5.7 Optimum Moisture Content (OMC)

Moisture content corresponding to maximum dry density as determined in Standard Proctor Tests (ASTM D698).

1.2.5.8 Permeability

Ability of pore fluid to travel through a soil mass via interconnected voids. "High" permeability indicates relatively rapid flow, and vice versa. Coefficients of permeability are generally reported in centimeter's per second.

1.3 Quality Control Organization

1.3.1 Quality Control

QC is defined as a planned system of inspection activities whose purpose is to provide the level of construction quality that will result in a facility that will meet or exceed the design requirements. The objective of QC is to provide construction quality that is safe, adequate, dependable, and economical. The overall system involves integrating the quality factors of several related steps including: the proper specification of what is wanted, installation to meet the full intent of the specification, and inspection (including related testing) to determine whether the resulting product is in accordance with the specification.

1.4 Quality Assurance Organization

1.4.1 Quality Assurance

QA is defined as a planned system of activities whose purpose is to provide assurance that the overall construction quality control program is being effectively implemented. The system involves a continuing evaluation of the adequacy and effectiveness of the overall QC program with a view to having corrective measures initiated where necessary.

1.4.2 Project Engineer

The QA program for this project will be the responsibility of the Project Engineer. His duties include:

1.4.2.1 Review of QC Activities

Review of the QC activities on a weekly basis, including verification of documentation, calculations, etc., as described in the QA Plan.

1.4.2.2 Preparation of QA Analyses

He will perform or cause to be performed all QA analyses specified in the QA Plan, as well as the QA Reporting.

1.4.2.3 Interim Reports

He will prepare or cause to be prepared all interim reports required under this Plan.

1.4.2.4 Certification

Upon completion of the project he will prepare an Engineering Certification Report for the project.

1.5 Communications

1.5.1 Written Reports

1.5.1.1 Contents

The Project Engineer will prepare a daily report from information on individual inspectors' logs. The report shall include:

- * Description, location and quantity of work performed.
- * Results of all tests and surveys performed.
- * Any observed discrepancies or deviation from the specifications, including status of resolutions.
- * Record of all pertinent verbal communications with contractor, client or QA/QC personnel.
- * Weather and site conditions.
- * Official visitors (regulatory agencies, etc.).

1.5.1.2 Distribution

Daily reports shall be prepared in original and two copies. One copy shall be delivered to the client's representative, one retained by the inspector, and the original delivered to the Project Engineer or his authorized representative. No reports will be made available to any third party without written authorization by the client.

1.5.2 Verbal Reports

1.5.2.1 Client

These communications shall include, but not be limited to:

- * Notice of major violations of or deviations from the specifications where immediate remedial action is indicated.
- * Interim results of tests when requested by client.
- * Other major problems or anticipated delays which may have an adverse effect on cost and/or scheduling.

Such communications will be confirmed in writing as soon as practicable. Serious problems or emergency situations will also be communicated to the QC Project Engineer as soon as possible.

1.5.2.2 Contractor

a. Content

Reports and communications to Contractor personnel will be limited to the results of QC tests: numerical value, whether passed or failed, probable reason for failure such as excessive moisture, lift thickness, improper material type, etc.

b. Limitations

Under no circumstances (other than extreme emergencies involving possible severe injury or property damage) will any inspector give any instructions to Contractor personnel or take any action which could be construed as supervising or directing Contractor's operations, procedures or methods.

SECTION 2.0

SURVEYING

2.0 SURVEYING

2.1 General

A qualified survey crew will be retained by the Contractor and directed by the Contractor to provide all construction layout, grid layout, level surveys, contour and cross section surveys. The survey crew shall be under the direct supervision of a Licensed Land Surveyor currently registered in the State of Louisiana.

2.2 Accuracy

Layout of all facilities should be tied into the coordinate system. Horizontal layout shall consist of a closed loop (either on itself or to a known coordinate point) with an error of closure not greater than 1:1000.

Level surveys and cross-section surveys should begin and be tied back into established benchmarks except where made solely for slope determination. Turning points should be solid objects with readings taken to the nearest 0.01 ft. Error of closure should not exceed 0.03 ft.

Individual elevation shots (cross-sections and depth determinations) should be taken to the nearest 0.10 ft.

2.3 Frequency

2.3.1 Layout

Horizontal control lines and vertical control loops should be laid out well in advance of construction operations. Offset lines are desirable to minimize the need for re-surveying during construction.

2.3.2 Initial Elevation Survey

This survey shall be made immediately prior to beginning of any work to provide a base for general cut and fill grades.

2.3.3 General Cut and Fill Elevation Survey

This survey consists of cross sections and shall be made upon completion of general cut and fill work required to prepare the site for installation of geotextile fabric, drainage system and liner.

2.3.4 Final As-Built Elevation Survey

This survey consists of topography, cross-sections and contours made upon completion of the construction.

The survey grid for cross-sections and contours should not exceed 50 feet. All such surveys shall be made before-and-after at the same horizontal points within 5 feet.

2.4 Documentation

All survey data will be recorded in standard field books with pertinent support data and sketches. Notes shall include date, facility surveyed, weather conditions and names of members of survey party. Upon completion of the final elevation survey, copies of all hand recorded field notes and sketches shall be provided.

Note: AutoCad Version 10 shall be used.

SECTION 3.0
IMPOUNDMENT PREPARATION

3.0 IMPOUNDMENT PREPARATION

3.1 Preliminary Earth Work

3.1.1 The general and/or earthwork contractor shall be responsible for preparing and maintaining the subgrade in a condition suitable for installation of the liner unless specifically agreed otherwise.

3.1.1.1 The earthwork contractor shall perform all preliminary earthwork including the removal and loading of the existing liner and substandard soil. The liner and substandard soil shall be hauled by certified and approved hauler. Liner material and substandard soil will be disposed of by others as discussed in Section 3.1.1.2. In situ material shall be proven to be 1×10^{-7} cm/sec permeability or less prior to the establishment of the pond original elevations for installation of the groundwater relief system and the HDPE liners.

3.1.1.2 The proper hauling and disposal of liner material and substandard soil (non-contaminated materials) shall be disposed of in a suitable permitted commercial solid waste landfill disposal facility. Disposal in a landfarm is not acceptable. The selection of commercial disposal facilities permitted to receive industrial solid waste should be from the following listing.

1. Colonial landfill, Standard Permit P-0021
Sorrento, Ascension Parish, Louisiana.
2. Woodside landfill, Standard Permit P-0080
Walker, Livingston Parish, Louisiana
3. White Oaks Landfill, Standard Permit P-0057
Monroe, Ouachita Parish, Louisiana
4. Magnolia Landfill, Standard Permit P-0046
Monroe, Ouachita Parish, Louisiana
5. Woolworth Road Landfill, Standard Permit P-0120
Keithville, Caddo Parish, Louisiana
6. Woodland Hills Landfill, Interim Permit IP-0043
Sulfur, Calcasieu Parish, Louisiana

3.1.1.3 The off-site transporters of the solid waste shall comply with Louisiana Environmental Regulatory Standards for projects, LAC 33.VII Section 705. Off-site transporters must be in compliance with the PSC (Public Service Commission) and DOT (Department of Transportation) regulations for the State of Louisiana.

The bodies of the vehicles used to transport the solid waste shall have liners and be covered at all times during transit from the plant site to the solid waste impoundment.

The client shall have all approved forms and credentials required completed for both transporting and landfill impoundment prior to commencement of the transportation.

The following transportation firms are qualified and suggested:

- 1) C M Penn & Sons, Inc.
Greenwell Springs, LA
- 2) POCO Environmental Services
Denham Springs, LA
- 3) St. Gabriel Contractors
St. Gabriel, LA

3.1.2 The earthwork contractor shall perform all preliminary earthwork including minor general cut and fill required to raise or lower the impoundment surface to the required grade. General cut work shall be visually inspected by the inspector. All equipment and methods used to perform earthwork cuts shall be approved by the Project Engineer or his designated representative. General fill material and installation work shall be inspected as specified in Section 3.2.

3.1.3 Surfaces to be lined shall be smooth and free of debris, roots, and angular or sharp rocks larger than one-quarter (1/4) inch in diameter. All fill shall consist of well-graded material free of organics, trash, clayballs or other deleterious material that may cause damage to the liner. The subgrade shall be compacted in accordance with design specifications but in no event less than is required to provide a firm unyielding foundation sufficient to permit the movement of vehicles and welding equipment over the subgrade without causing rutting or other deleterious effects. The subgrade shall have no sudden sharp or abrupt changes in grade.

3.1.4 The earthwork contractor shall protect the subgrade from desiccation, flooding and freezing. Protection, if required, may consist of a thin plastic protective cover (or other material as approved by the Project Engineer) installed over the completed subgrade until such time as the placement of the liner begins. Subgrades found to have desiccation cracks greater than 1/2 inch in width or depth, or which exhibit swelling, heaving or other similar conditions shall be replaced or reworked by the general and/or earthwork contractor to remove these defects.

3.1.5 Surface Acceptance

Upon request, liner Manufacturer's Representative will provide the Owner's Representatives with a written acceptance of the surface to be lined prior to commencing installation. This acceptance will be limited to an amount of area that the liner manufacturer is capable of lining during a particular work shift. Subsequent repairs to the subgrade and the surface shall remain the responsibility of the general and/or earthwork contractor.

3.2 General Fill Material Control

3.2.1 Frequency of Material Control Testing

3.2.1.1 General Fill Material Classification Tests

Samples shall be secured for classification (ASTM D2487), Atterberg Limits (ASTM D4318) and apparent moisture content (ASTM D2216) testing at a rate not less than 1 per 50 cubic yards. Prior to construction, the Contractor shall notify the Project Engineer of the source(s) of his imported materials. During construction, the Project Engineer shall be notified of any changes in imported material sources.

3.2.1.2 Check Proctors - General Fill

A check Moisture/Density Relationship (ASTM D698) shall be performed for every 100 cubic yards of material placed. The general fill material shall be secured from an uncompacted lift.

3.2.2 Sampling Procedure

3.2.2.1 General Fill Material Classification Tests

For Soil Classification test sample size and method shall be in accordance with ASTM D2487. For Atterberg Limits and Apparent Moisture test, approximately a 1/2 pound sample shall be secured from the exact location of a field density test. The depth shall not exceed 4 inches. The total sample shall be sealed into a plastic bag, identified with the field density test number using an indelible marker, and returned to the laboratory under Sample Control (Section 3.2.4.3).

3.2.2.2 Check Proctors - General Fill Material

Each sample should weigh about 50 pounds. It shall be taken only from the uncompacted material. It shall be a composite taken equally from 10 locations within a 10 foot radius. The sample shall be sealed into a plastic bag, and indelibly marked with its location, and lift number. The plastic bag shall be placed into a cloth support bag which is tagged with the same information.

3.2.3 Equipment and Calibration

3.2.3.1 Equipment

The equipment necessary for this sampling includes:

- A. Shovel
- B. Plastic and Cloth Bags
- C. Indelible Marker

Note that cement bentonite grout is required for sealing the holes made during any field density testing. Virgin hydrated and tamped bentonite pellets may be used as an alternative to cement bentonite grout.

3.2.4 Field Documentation

3.2.4.1 Test Location

The locations where any material samples are obtained must be clearly indicated by the Inspector. The locations of New Material sources may be described in words. For samples taken during material placement, a Location Map shall be prepared. This is normally on the map which locates the field density tests.

3.2.4.2 Data Sheet

The Sample Control Sheet shall indicate the sample number.

3.2.4.3 Transfer of Sample Custody

A laboratory technician will sign for the sample on the Sample Control Sheet. If the sample is received during working hours, it shall be logged-in in the Inspector's presence. Otherwise, the sample shall be placed on the Ready Rack shelves. The laboratory supervisor will place a copy of the signed Control Sheet in the Inspector's box.

3.2.5 Reporting

3.2.5.1 Internal

The Inspector's Daily Field Report shall document that material control testing was performed, and shall include a map showing the numbers and locations of the tests.